NOVASTOR
WWW.NOVASTOR.COM

NovaBACKUP®

User Manual

NovaStor / December 2010

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Installation

NovaBACKUP System Requirements

Supported Operating Systems

NovaBACKUP 12 Professional:
Windows 7 (32/64 Bit)
Windows Vista (32/64 Bit) SP2
Windows XP Home/Professional SP3

NovaBACKUP 12 Server:
Windows 7 (32/64 Bit)
Windows Vista (32/64 Bit) SP2
Windows XP Home/Professional SP3
Windows 2003 Standard/Web/Enterprise/SBS SP2
Windows 2008 Server (32/64 Bit)
Windows 2008 Server R2

NovaBACKUP 12 Business Essentials:
Windows 7 (32/64 Bit)
Windows Vista (32/64 Bit) SP2
Windows XP Home/Professional SP3
Windows 2003 Standard/Web/Enterprise/SBS SP2
Windows 2008 Server (32/64 Bit)
Windows 2008 Server R2

SQL agent
SQL 2005, SQL 2008 and SQL Express

Exchange agent
Exchange2000, Exchange2003 and Exchange2007

System Software

- Internet Explorer 7.0 or Greater

Hardware

- Pentium III Processor or better
- 512 MB of RAM minimum
- 1500 MB free Hard drive space
- Additional hard drive space is required for backup to disc and CD/DVD

Installing the Software

Installing from downloaded file:

Run the SETUP.EXE program to install NovaBACKUP.

To install from CD:

Insert the CD into your CD-ROM drive. In most cases, SETUP.EXE will automatically begin. (If this fails to work, double click the SETUP.EXE file on the CD).

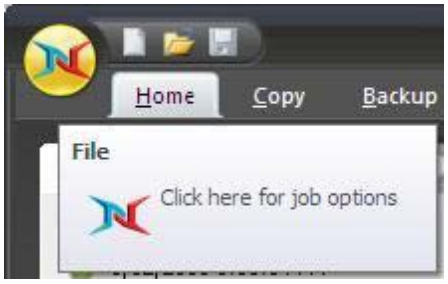
Getting To Know The User Interface

Getting To Know the User Interface

The User Interface

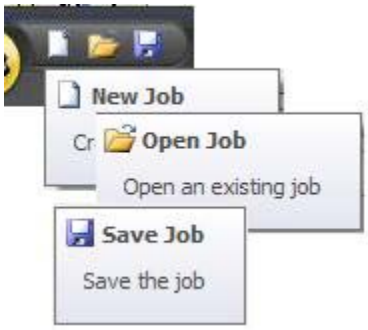
The user interface consists of a single main screen. At the top of this screen you'll find the "Launch Button", "Quick Access Toolbar" and a set of seven tabs.

Launch Button



The Launch Button is in the top-left corner of NovaBACKUP. It provides fast access to files and frequently used commands. From here, you can quickly create a new job, open, run and save an existing job, or import previous backup jobs.

Quick Access Toolbar



From here, simply click on the appropriate icon to create a new job, open an existing job or save the current job.

Tabs

The Home tab contains convenient information about your previous and next scheduled backup as well as useful shortcuts and the "Quick Select" feature. The Backup tab allows you to select files and folders to backup. Similarly, the Copy tab allows you to select files and folders to be copied to another destination. The Restore tab enables you to make selections in order to restore files and folders. The Schedule tab provides a means to schedule backup jobs to run at a future time/date. The Logs tab

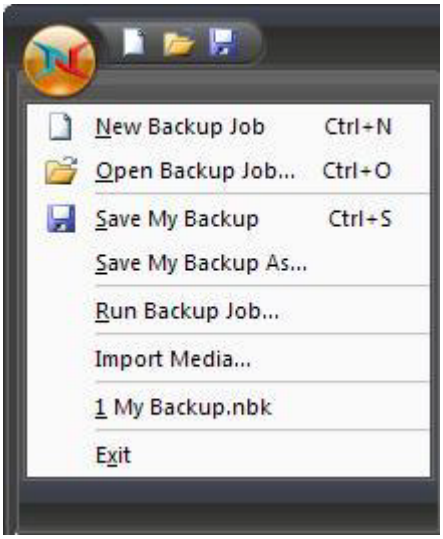
provides access to logs for previously run jobs. The Device tab provides a means to configure and view backup devices. The Status tab gives you a method to view the progress of the currently running job.

The file lists in the Backup, Copy and Restore tabs look very similar to the Windows Explorer, which makes it familiar and easy to use. Selected files can be browsed by expanding the drives or network resources in the tree view display on the left-hand side. Next to each folder and file is a check box. These are used for adding and removing files from the selection list.

Note: The name of the currently selected job is listed at the top of the NovaBACKUP program window.

Launch Button

The Launch Button is in the top-left corner of NovaBACKUP. It provides fast access to files and frequently used commands. From there, you can quickly create a new job, open, run and save an existing job, or import previous backup sets.



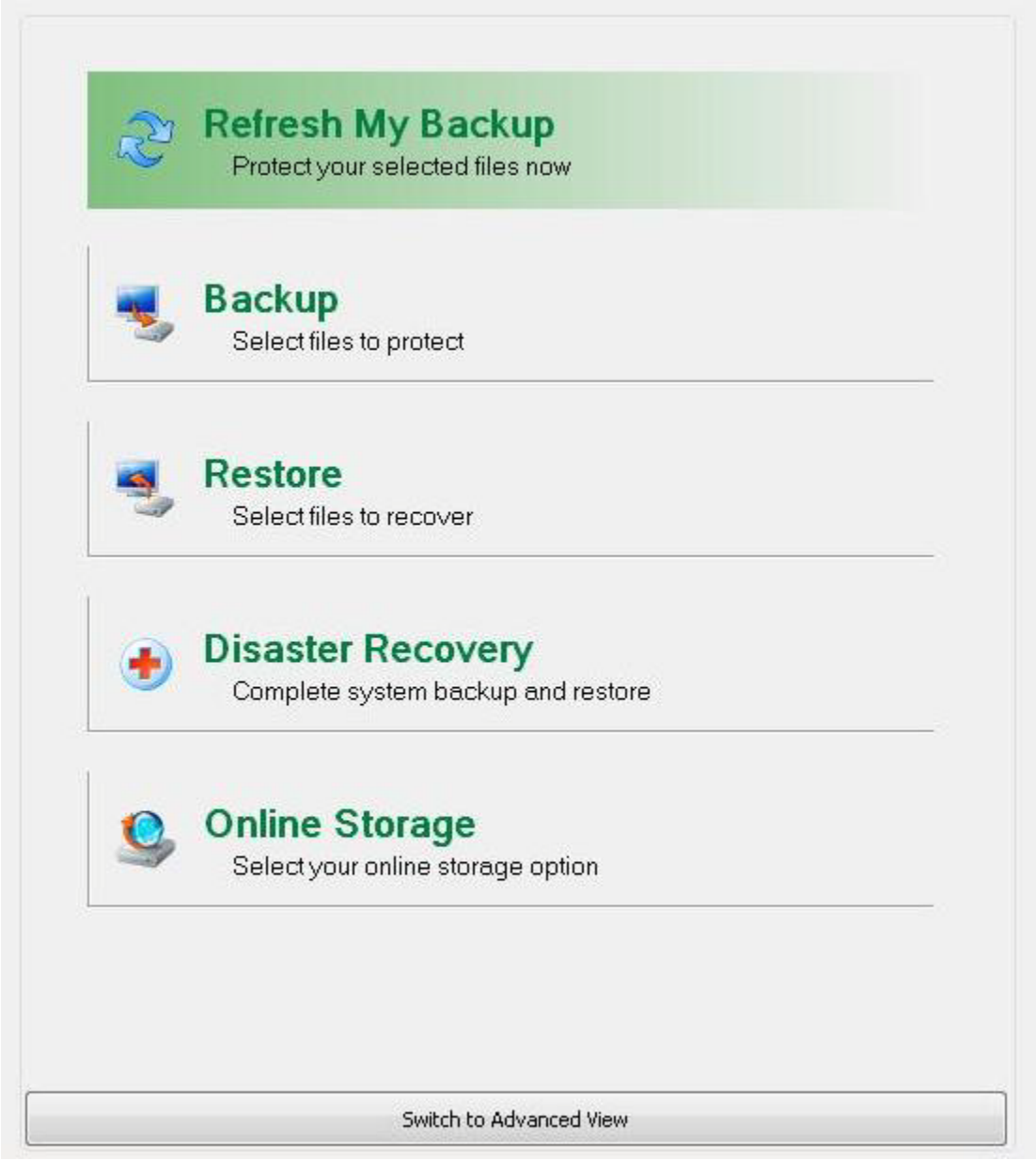
Item Detail

New Job	This will allow you to create a new job based on the tab selected.
Open Job	This will allow you to open a previously saved job.
Save Job	This will allow you to save the current job.
Save Job As	This will allow you to save the current job using a different name.
Run Job	This will allow you to run a previously saved job
Import Media	This will allow you to import backup jobs that do not appear in the Restore View. These backup jobs are usually created with previous installations of or from other computers running NovaBACKUP.

Recent Files List	From this list, you can select a recently used job.
Exit	This exits the application.

The Simple View

The simple view is used to perform the most common tasks requiring minimal detail. The advanced view with more options and detail can be reached by clicking the bottom button to switch views. In the advanced view click the link at the bottom of the screen to switch to the simple view.



Refresh My Backup

Click this panel for an easy one-step method to run your default backup. The default backup is also referred to as the "simple backup" since it is the one and only backup run from the simple view. If you have not defined your default backup, when clicking this panel you will be given that option. In that case the same action will occur as when clicking the Backup panel.

Backup

Click this panel to setup and complete your default backup. This will start the Simple View Backup wizard. Please refer to the "wizards" section for more detail.

Restore

Click this panel to start the Restore wizard. Please refer to the "wizards" section for more detail.

Disaster Recovery

Click this panel to start the Disaster Recovery wizard. Please refer to the "wizards" section for more detail.

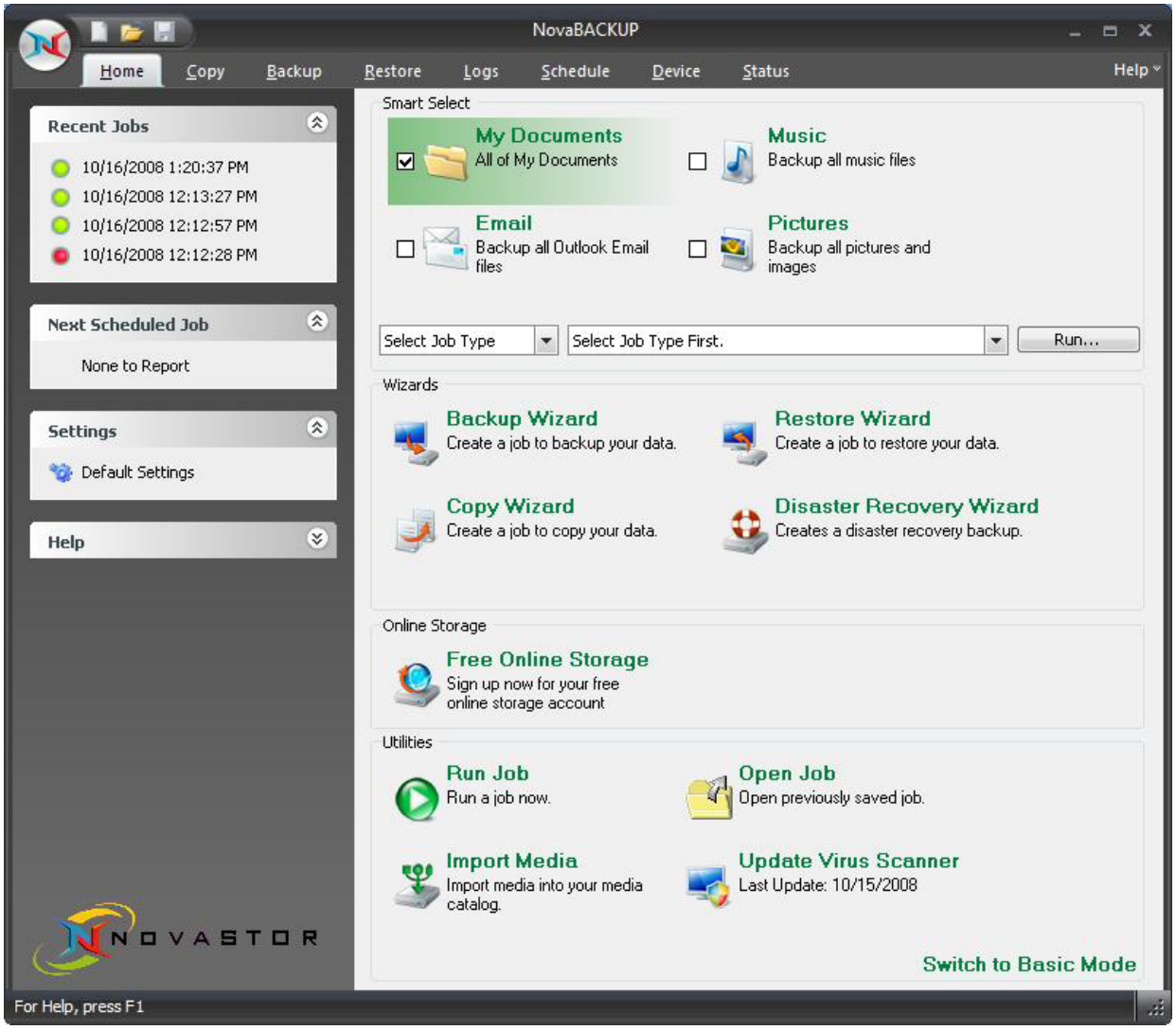
Online Storage

Click this panel to sign up for an online storage account or to configure your online devices if one or more already exists.

Tab Functionality

Home Tab

On this tab, you will find the task window on the left containing summary information on the most recent and next scheduled operations, the link to configure global settings and display the help file.



Note: Clicking on any of the "Recent Tasks" items will open the corresponding log file for you to review. Clicking on any of the "Next Scheduled Task" items will open the corresponding schedule so you can view or edit it.

Quick Start

On the right side, you can quickly launch a backup of your Documents, Music, Pictures or Email files using the Quick Start Backup or Copy feature.

To use Quick Start, select the types of files you want to backup including; "My Documents", Picture Files, Music Files or Emails. Next, select the operation (Copy or Backup) from the drop down list followed by the destination device/path. Click "Run" to perform the selected task now.

Note: To schedule a Quick Start operation, refer to the Copy or Backup Tab Section.

Wizards

The Wizards are designed to make the process of creating a job or adding a backup device much simpler by leading the user through a step-by-step process.

Clicking on a Wizard link launches the Backup, Copy, Restore, Device or Disaster Recovery Wizard that steps you through setting up the operation quickly and easily. For further information, refer the appropriate "NovaBACKUP Wizard"

Utilities

Run Job - Clicking this link allows you quickly select a specific Backup, Copy or Restore task to run. After making your selection, click "Run" and the specific task will be performed immediately.

Open Job - Select this link to open a previously save Backup, Copy or Restore job permitting the job to be updated, saved or run.

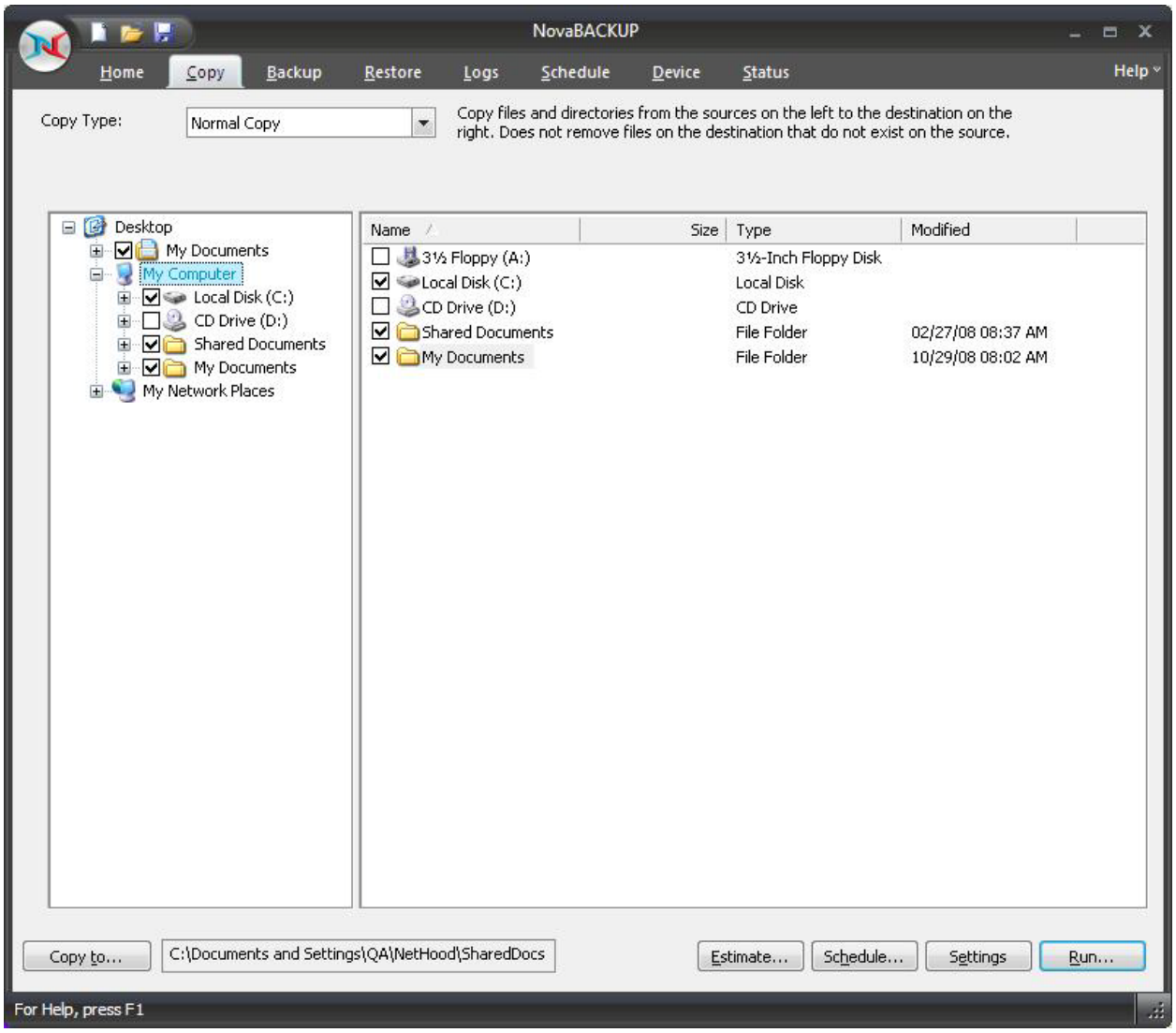
Import Media - This link launches the Import Media function allowing you to add details for media not already saved to the current NovaBACKUP database. For example, media from another system or installation of NovaBACKUP.

Update Virus Scanner – Click this link to manually obtain the latest Virus Scanner definition file. The "Last Update" indicates the date this occurred last.

Copy Tab

From here, you can create a job that will copy the files/folders you specify from one location to another. The different options available allow you to adjust the copy job to your specific needs.

What are copy jobs? *Copy jobs are combinations of directories and files that are selected as well as any of the options (including filters) that go along with that specific copy job. Copy jobs differ from backup jobs in that they result in the exact same set of files being "copied" or transferred to the destination device including: Hard Disk, Network Drive, CD or DVD, and online storage. Note: Copy jobs DO NOT permit the use of tape.*



Button Functions

"Copy Type" Button

Select the copy type you with to perform:

"Copy"
Copy files and directories from the source(s) on the left to the destination or the right. Does not remove files on the destination that DO NOT exist on the source

"Mirror"
Mirror files and directories from the source(s) on the left to the destination or the right. REMOVES files on the destination that DO NOT exist on the source

"Bidirectional Copy"
Copy files and directories between the left and the right paths. Results in an identical set of files and folders on both sides: Files on one side, but not the other are copied

Note: *Files that have been deleted from one path will NOT be deleted from the other*

*"*Copy To" Button

Click this button to display a dialog showing all available devices. From here, select the destination device and/or path you want to use for this job

"Make Folder" Button

By highlighting an existing path and clicking this button, you are able to create a new, empty folder

"Estimate" Button

This will allow you to find out the estimated number of files and size of the current copy job. Once selected a "Estimate" box will appear with the following information:

Files
This indicates the Count (number of files) and Size (In Gigabytes) that you have selected for the job. This is especially helpful if the size of a copy is an issue when attempt to copy files to external devices with limited space such as CD/DVD's or USB Devices.

Folders
This indicates the number of folders that you have selected for the job.

"Schedule" button

This button is used for the schedule options. Within this window, you will be able to schedule the job as well as name it. You have various scheduling options including; one time, minute, hourly, daily, weekly, or monthly. You may also set the time and date of when the job will run.

"Settings" button

This will take you to the Advanced options for this specific copy job. Refer to the Copy Job Settings Topic for further information

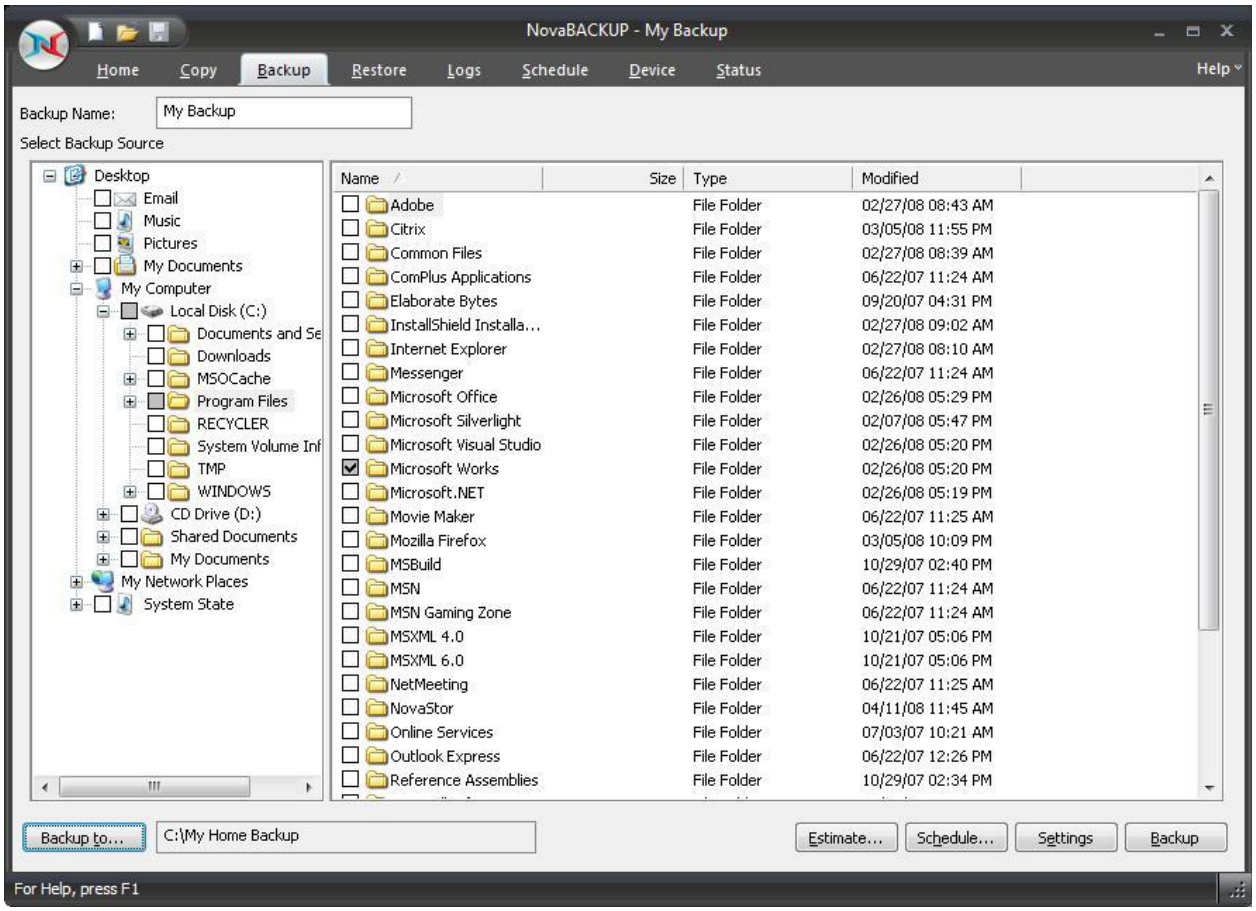
"Copy" button:

This button starts the selected copy job immediately.

Backup Tab

Using this tab, you can create a backup set that will include the files that you specify. The different options available allow you to adjust the backup job to your needs.

You may select items from the "Select Backup Source" pane. Folders and volumes will be on the left and files on the right. You may select a descriptive name for the backup job by enter it in the "Backup Name" field at the top. This will allow you to clearly identify each job on a specific media.



Backup Job Name

In this text box, you can input an optional name for the current backup job you are creating. Be sure not to confuse this with the filename of the backup job. The backup job name is essentially a descriptive name that you have assigned to the actual backup job file. A default job name will be assigned to each new backup indicating the date and time within the name. This name structure is just one way to help organize your backup jobs.

What are backup jobs? *Backup jobs are combinations of directories and files that are selected for backup as well as any of the options (including filters) that go along with that specific backup. Backup jobs are used to allow one or more collections of files to be backed up at different times. For example,*

one backup job could be created for accounting data, and another backup job could be created for important data that change daily. The important data might be backed up daily or even hourly, while the accounting data could be backed up at the end of the week.

Remember that setting a backup job name is optional and is meant to aid in managing backup jobs. For instance, under the Logs Tab, which will be discussed later, a listing of previous backup activity can be seen. Each of these logs is indicated by a Backup Job Name and a date. If you do not specify a Backup Job Name for any of your backup jobs, it will be a daunting task to differentiate the several backups solely by the dates and times of each of the backups. Thus, it is highly recommended that you assign a name to each of your backup jobs in order to ease your ability to distinguish the different backups.

Button Functions

"Estimate" Button

This will allow you to find out the estimated number of files and size of the current backup job. Once selected a "Estimate" box will appear with the following information:

Files

This indicates the Count (number of files) and Size (In Gigabytes) that you have selected for the job. This is especially helpful if the size of a backup job is an issue when attempting to backup files to external devices with limited space such as CD/DVD's or USB Devices.

Folders

This indicates the number of folders that you have selected for the job.

"Schedule" button

This button is used for the schedule options. Within this window, you will be able to schedule the job as well as name it. You have various scheduling options including; one time, minute, hourly, daily, weekly, or monthly. You may also set the time and date of when the job will run.

"Settings" button

This will take you to the Advanced options for this specific backup job. Refer to the Backup Job Settings Topic for further information.

"Backup To.. " button

Click this button to display a dialog showing all available devices. From here, select the backup destination device and/or path you want to save the backup to

"Backup" button

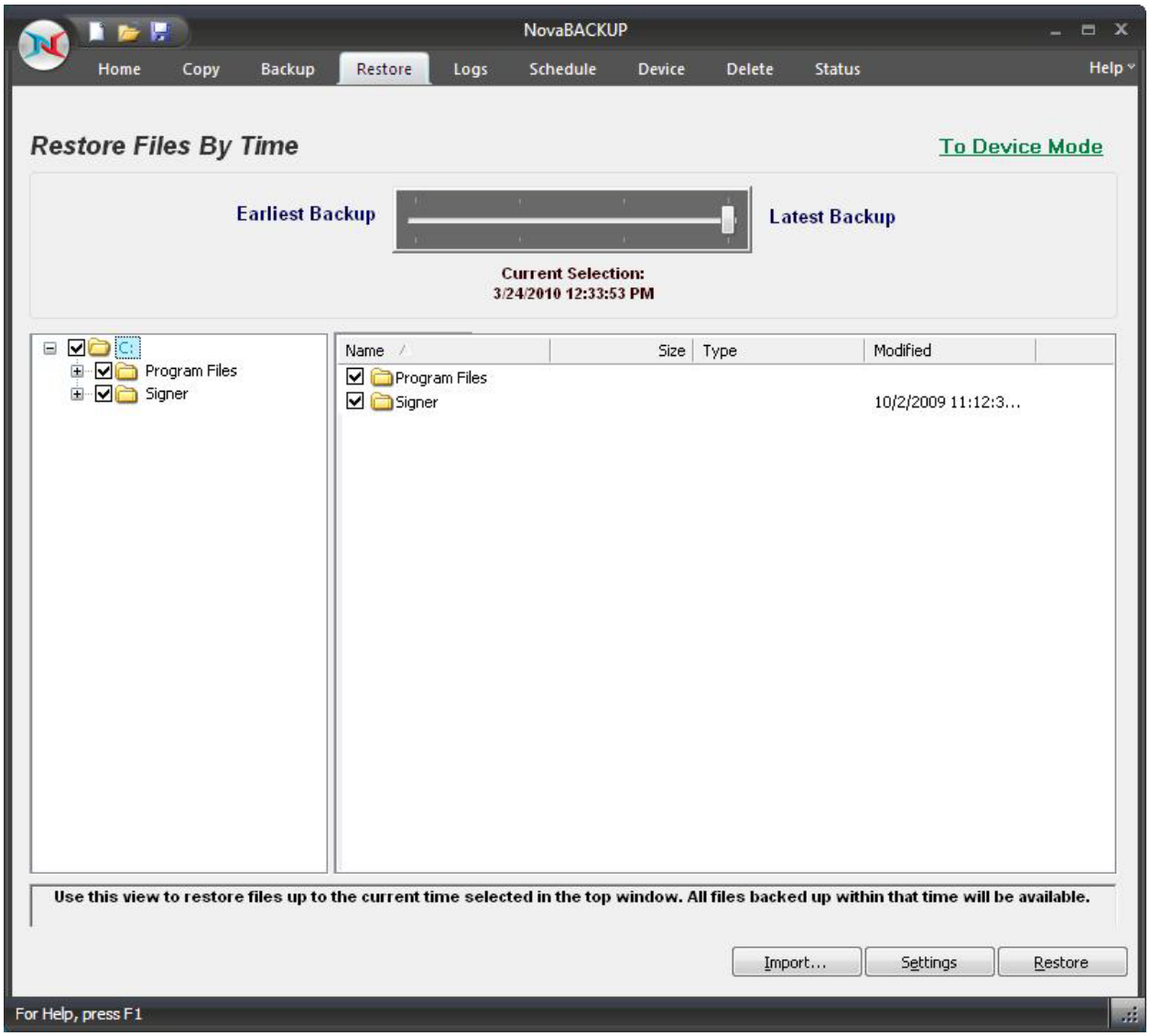
This button starts the selected backup job immediately.

Restore Tab

Under the Restore tab you will find all the folders/files from previous backups that you can restore either to the original or alternate location.

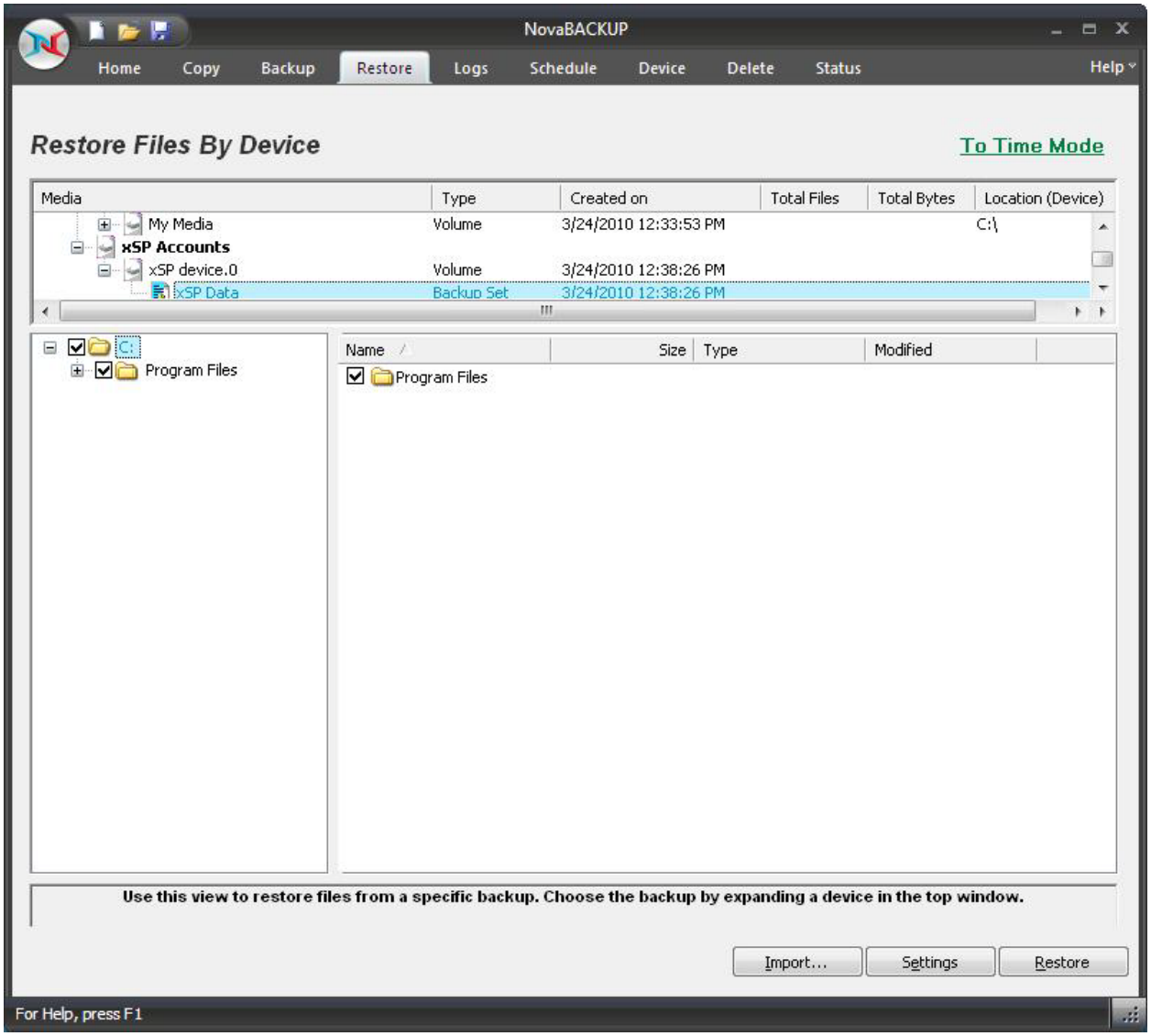
Restore Files By Time

This 'TimeSlider' view uses a patent pending technology to provide a single restorable fileset without the need to select the backup source device. Using the slider, files are listed based on the range of time the backup has run.



Restore Files By Device

This view displays a restorable file set contained in a specific backup. Use the device view in the upper window to select the location of the backup and the backup session containing the files available to restore.



Why don't I see any media listed?

If you are unable to see anything populated in the media view, you might need to perform an import on the media which is explained below in the import section.

Select Backup Job

From the Media View in the top window, you will see a list of available backups that you can restore from. Simply select the backup you would like to restore by double-clicking the entry and a listing of the folder/files included in that backup will appear in the windows below.

The Media View - Restore Mode

This window allows you to view all available backups to restore from, based on the database of backup jobs and folder/file selections cataloged within the database. All backups are categorized by destination type (Disk, Removable Disk, CD/DVD, Internet, and Tape) and further categorized by backup job name. This view is similar to the Media View as seen in the Backup mode. However, only destinations with backups available for restoration will be listed.

Select Restore Item(s)
These selection windows are similar to the ones seen on the Backup Tab. Here, a listing of files and folders will be displayed once a backup job has been selected for restoration. The only files and directories that will be listed are the ones that were included in the backup job that you are restoring. In the selection windows, you can select files and/or folders just as you did in the Backup Tab when you selected the files for backup.

By default, if you are restoring files to their original location, files that already exist in that location will not be overwritten by the files that are to be restored. Check your Restore Setting to alter this.

Button Functions

"Import" Button

This button will allow you to import backup jobs that are not in the current NovaBACKUP database. Simply click on the button and browse to the backup job that you desire to import. Once imported into database, the backup job will then be listed in the media view, and available for restoration.

"Settings" Button

This button will allow you to access some options that you have in the restore process. These options are discussed in Restore Job Settings Topic.

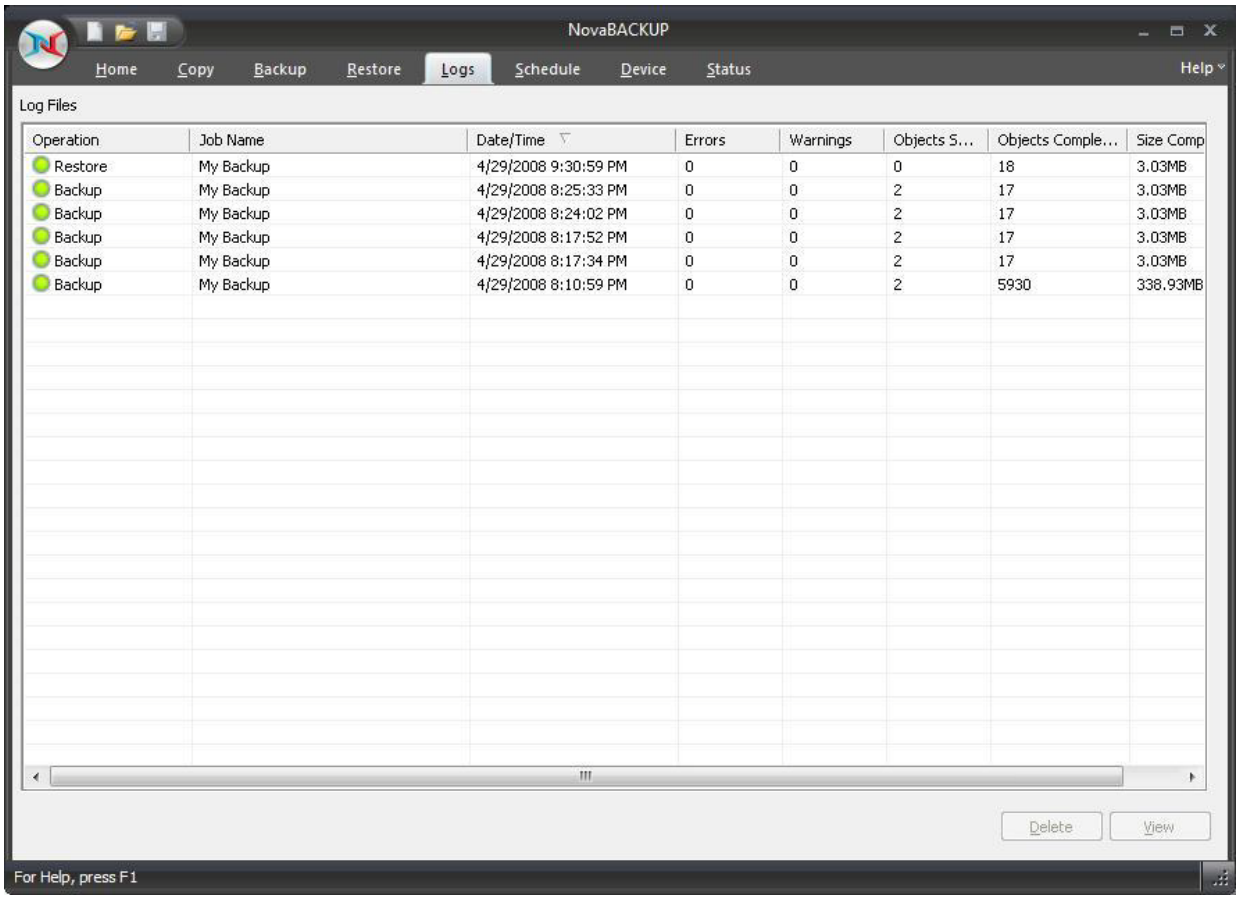
"Restore" Button

Once you have selected the files, folders, or drives that you want to restore, you may press this button to start the restore immediately.

If you are restoring from a complete set of spanned media, you should always select the first piece of media as your first restoration media. NovaBACKUP will prompt you to insert each subsequent piece of media if necessary. You must have all media available to do the restore. If your backup consists of 5 pieces of media and media #3 is corrupt/missing/damaged, you will only be able to restore data from the first two pieces of media.

Logs Tab

From here, you can quickly determine the status of a Copy, Backup or Restore job that was performed.



The columns in the summery view include:

Operation: Includes - Copy, Backup, Restore & Import.

You can quickly determine the status of the backup by the color-coded icon next to each operation:

- Operation completed successfully
- Operation completed, but had warnings
- Operation had errors

Job Name: The name of the job for this log file

Date/Time: The Date & Time the specific job was run

Errors: The number of errors encountered after running the job

Warnings: The number of warnings encountered after running the job

Objects Selected: The number of objects selected before running the job

Objects Completed: The number of objects successfully completed after running the job

Size Completed: The total size of all objects successfully completed after running the job

You can quickly sort the logs view by clicking on the appropriate column heading at the top of the window

Button Functions

Delete Button

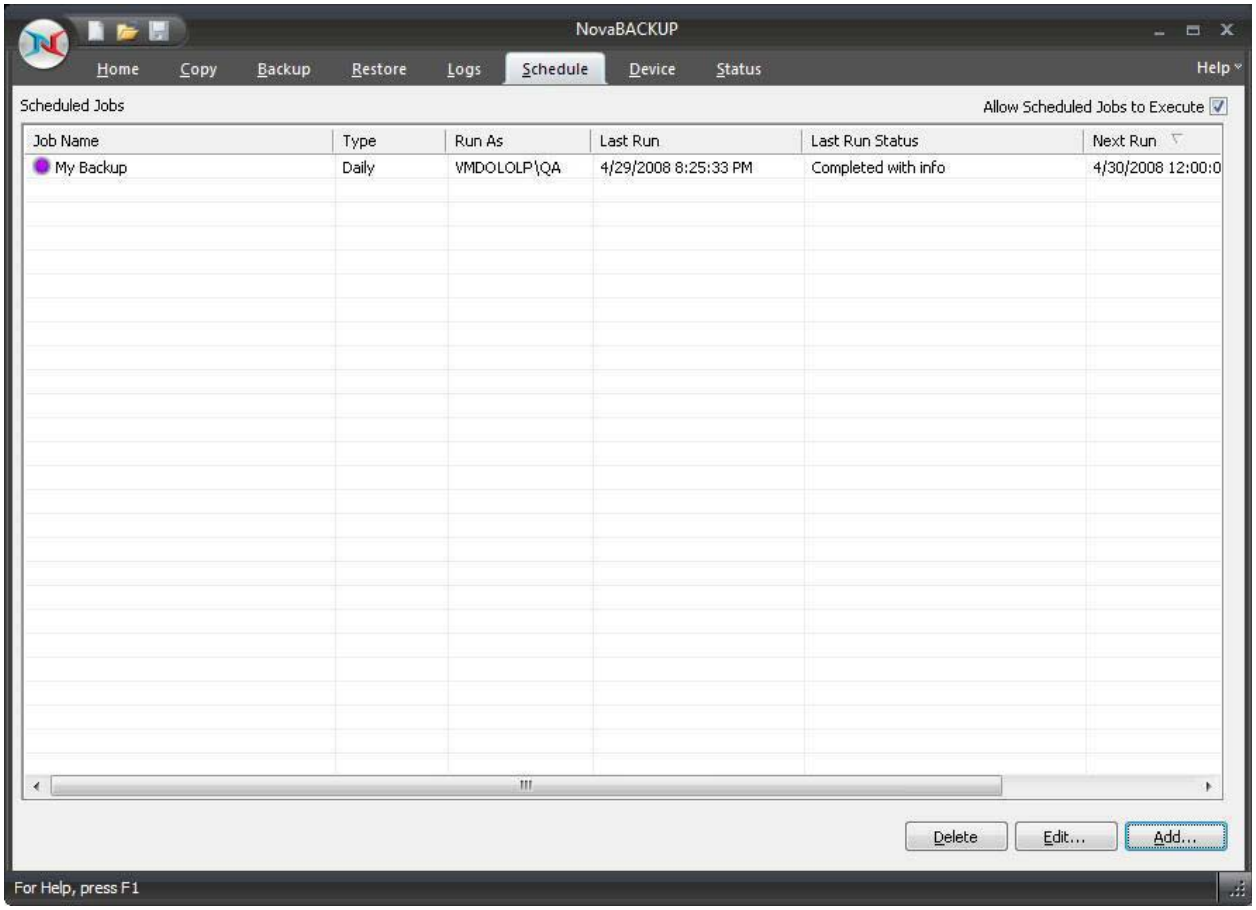
To delete a log file, simply select the log file and press the *Delete* button. To delete multiple log files, you may select more than one by using the Shift and/or Ctrl buttons on your keyboard to select the logs and pressing the Delete button.

View Button

To view the log file, select the log you would like to open and press the View button. Alternatively, you may also simply double-click the log file you want to view. For further details, see the Using the Logs section.

Schedule Tab

From this tab you are able to view, modify, add, run, and delete scheduled tasks.



Remember: *You can quickly disable all schedules from running by unchecking the option - "Allow scheduled jobs to execute"*

The initial view contains an overview of all scheduled jobs including the following columns:

Job Name: Job or Script Name

Type: The "Type" of schedule set - includes (One Time, Minute, Hourly, Daily, Weekly, Monthly)

Run As: Account used to run the job,

Last Run: When the job last ran

Last Run Status: The status the last time the job ran - includes:

Completed - The scheduled job completed with no information (log)

Completed with info - The scheduled job completed successfully and a log was generated

Completed with warnings - The scheduled job completed but had warnings

Completed with errors - The scheduled job completed but had errors

Failed - The scheduled job failed to run

Next Run: When the job is scheduled to run again

Current Status:

Waiting - Schedule is waiting to run

Running - Schedule is running

Held - Schedule has been placed on hold

Error - Schedule will not run again until the error is corrected (Invalid Credentials, no media, no device available)

Right-Click Functions

Right-clicking on any of the listed schedules displays a menu with the following functions:

New - Create a new schedule
Hold/Resume Schedule - Permits the selected schedule to be placed on hold or resumed if already held
Modify Schedule - Displays the schedule details so they can be viewed/modified
Modify Job - Displays the specific job details so they can be viewed/modified
Run Now . . - Runs the job associated with the selected schedule immediately
View Log - Displays the log details of the scheduled job the last time it was run
Delete - Deletes the selected schedule item from the list

Button Functions

Delete Button

This button will allow you to delete the selected schedule item from the list, regardless of its status.

Edit Button

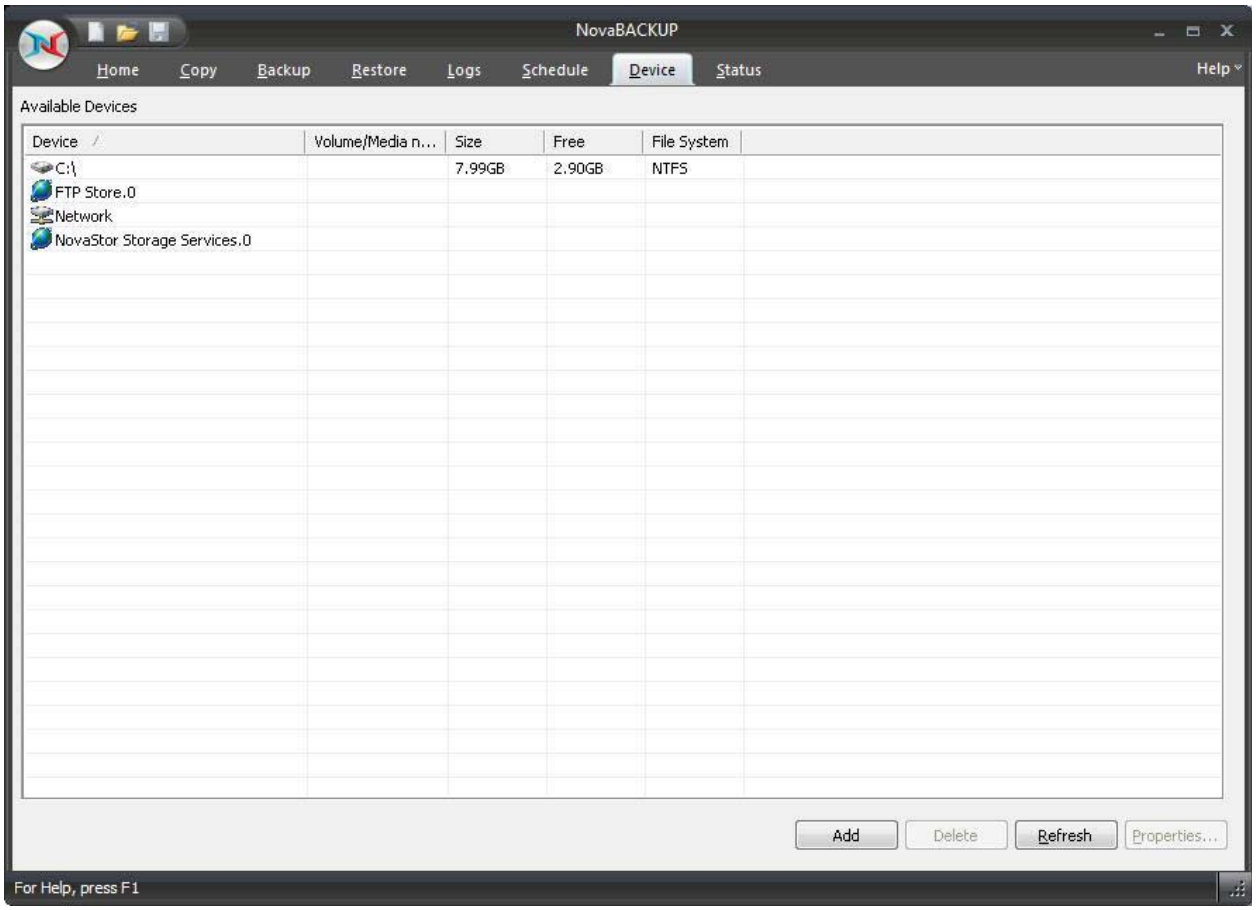
This button will allow you to edit the selected schedule item.

Add Button

This button will allow you to create new scheduled tasks.

Device Tab

The Device Tab shows a list of all available storage devices jobs can be configured to utilize. In from this tab, you're able to add, modify and delete devices.



The initial view contains an overview of all scheduled jobs including the following columns:

Device - The name of the device

Volume (Media) - The name of the volume (Disk, Removable Disk) or media name (CD/DVD, Tape)

Size - Total size of the device or media

Free - Total available size of the device or media

File System - Type of file system (NTFS, UDF, FAT32, FAT, etc)

Right-Click Functions

Right-clicking on any of the listed devices displays a menu with functions appropriate to the device:

Hard Drive, Removable Hard Drives, Networked Drives, CD/DVD & Tape:

Import - Allows you to import backup jobs that are not in the current NovaBACKUP database

CD/DVD & Tape Devices

Eject Media - Eject the currently inserted media
Quick Erase Media - Performs a quick erase (header information is erased, but data remains)
Full Erase Media - All data is erased from media

Internet storage devices

Delete Device - Deletes the currently selected Internet device
Properties - List the properties associated with the selected device

Button Functions

"Add" Button (Only applies to Internet Devices)

Launches the Internet Device dialog - Refer to Internet Devices topic for additional information

"Delete" Button (Only applies to Internet devices)

Deletes the currently highlighted Internet device from the list.

"Refresh" Button

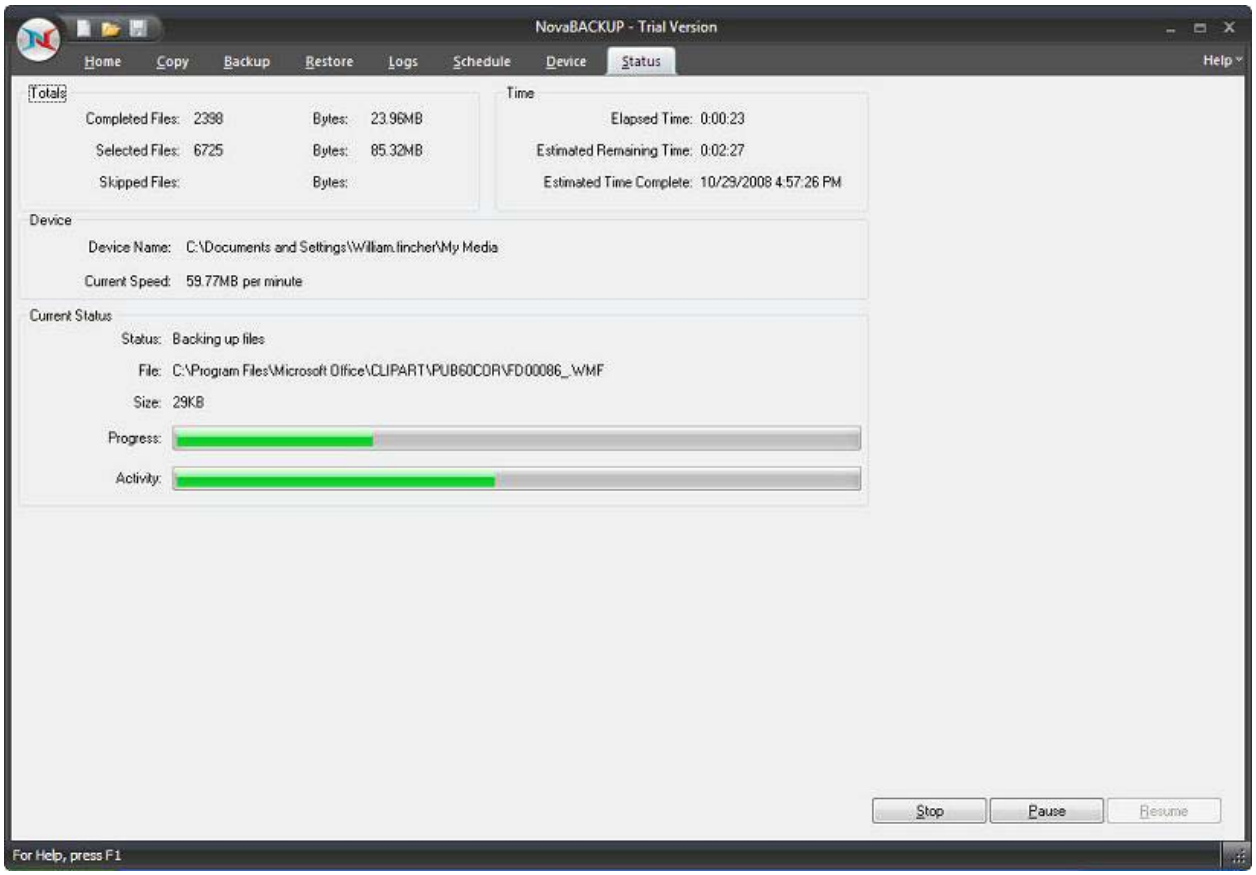
Refreshes the device view to include newly added or connected devices.

"Properties" Button (Only applies to Internet devices)

Displays the properties of the highlighted Internet devices. You can also display the device properties by double-clicking on the device in the list - Refer to the Internet Devices topic for further information

Status Tab

From here, you can quickly determine the status of a currently running job.



The status view includes the following sections and items:

Totals

Completed Files/Bytes - The number of files and bytes successfully completed
Selected Files/Bytes - The total number of files and bytes selected by the job
Skipped Files/Bytes - The number of files and bytes that were skipped while running the job

Time

Elapsed Time: Hours:Minutes:Seconds representing the total amount of time the current job has been running
Estimated Remaining Time: Hours:Minutes:Seconds representing the estimated time remaining for the current job to complete (This figure is an estimate only - actual time may vary)
Estimated Time Completed: Date/Time representing the estimated completion time of the current job (This figure is an estimate only - actual time my vary)

Device

Device Name: The name of the device/media used for the currently running job
Current Speed: The speed (thruput) of the data being transferred for the currently running job

Current Status

Status: Status of the currently running or completed job
File: The file currently being transferred
Size: The size of the file currently being transferred
Progress: The progress bar representing the percentage completed of the currently running job (This is an approximate indication of job completion. Actual percentage may vary).

Button Functions

"Stop" Button - Stops the currently running job

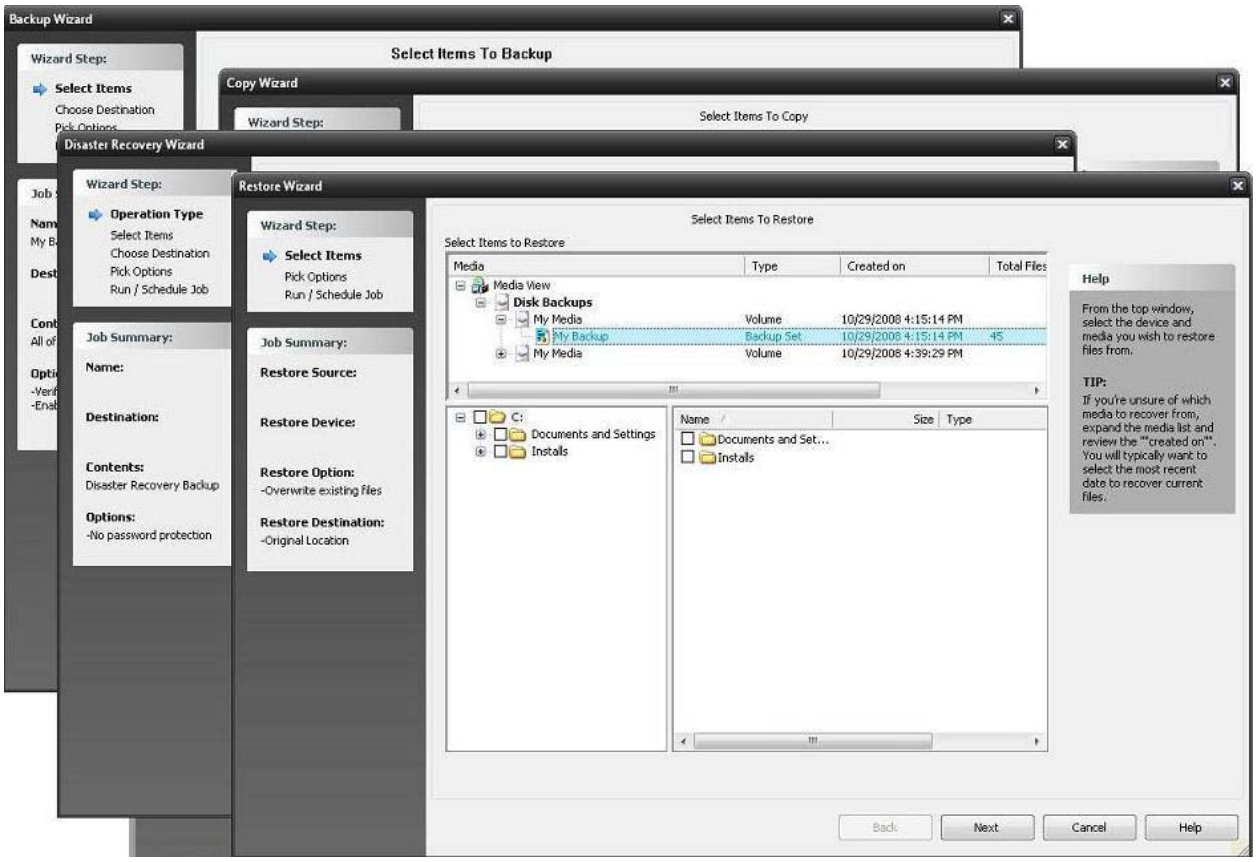
"Pause" Button - Pauses the currently running job - Job remains active

"Resume" Button - Resumes the previously paused job

Wizards

The NovaBACKUP Wizards

The NovaBACKUP Wizards are a step-by-step guide to help you create a backup or copy task, restore files, and perform disaster recovery jobs.



If at any time during the use of the Wizards you would like to go back to previous screens, simply click on the "Back" button. If you would like to cancel the Wizard and go to the main user interface, click on the "Cancel" button. Clicking "Next" will take you to the next screen once the options have been selected on the current screen.

Backup, Copy, Restore, Disaster Recovery or Device Mode

To start your appropriate Wizard, select whether you want to backup, restore or create a disaster recovery backup your files and settings.

Backup files

This selection will allow you to backup your files, folders and settings, allowing you to restore them at a later time.

Copy Files

This selection will allow you to copy your files, folders and settings to another device such as a hard drive, CD/DVD or USB Flash Memory device.

Restore files

This selection will allow you to restore files, folders and settings that were previously backed up with NovaBACKUP PC.

Create a Disaster Recovery Backup

This selection will allow you to create or schedule a backup that is Disaster Recovery compliant.

In the event of a complete disaster, a Disaster Recovery Boot Disc will allow you to recover your operating system prior to recovering the data and settings contained in your Disaster Recovery compliant backup. It is recommended that you create a Disaster Recovery Boot Disc at least once to back up your operating system. If you make changes to your OS or hardware configurations, new Disaster Recovery Disc should be created.

Simple View Backup

Setup Backup

The Setup Backup screen is used to define your default backup.

Selections - What to backup

In this section you may choose to backup all files on your system drive, only personal files or you may choose to select specific files. When choosing to select specific files, a file display appears when clicking the Next button.

Options - how to backup

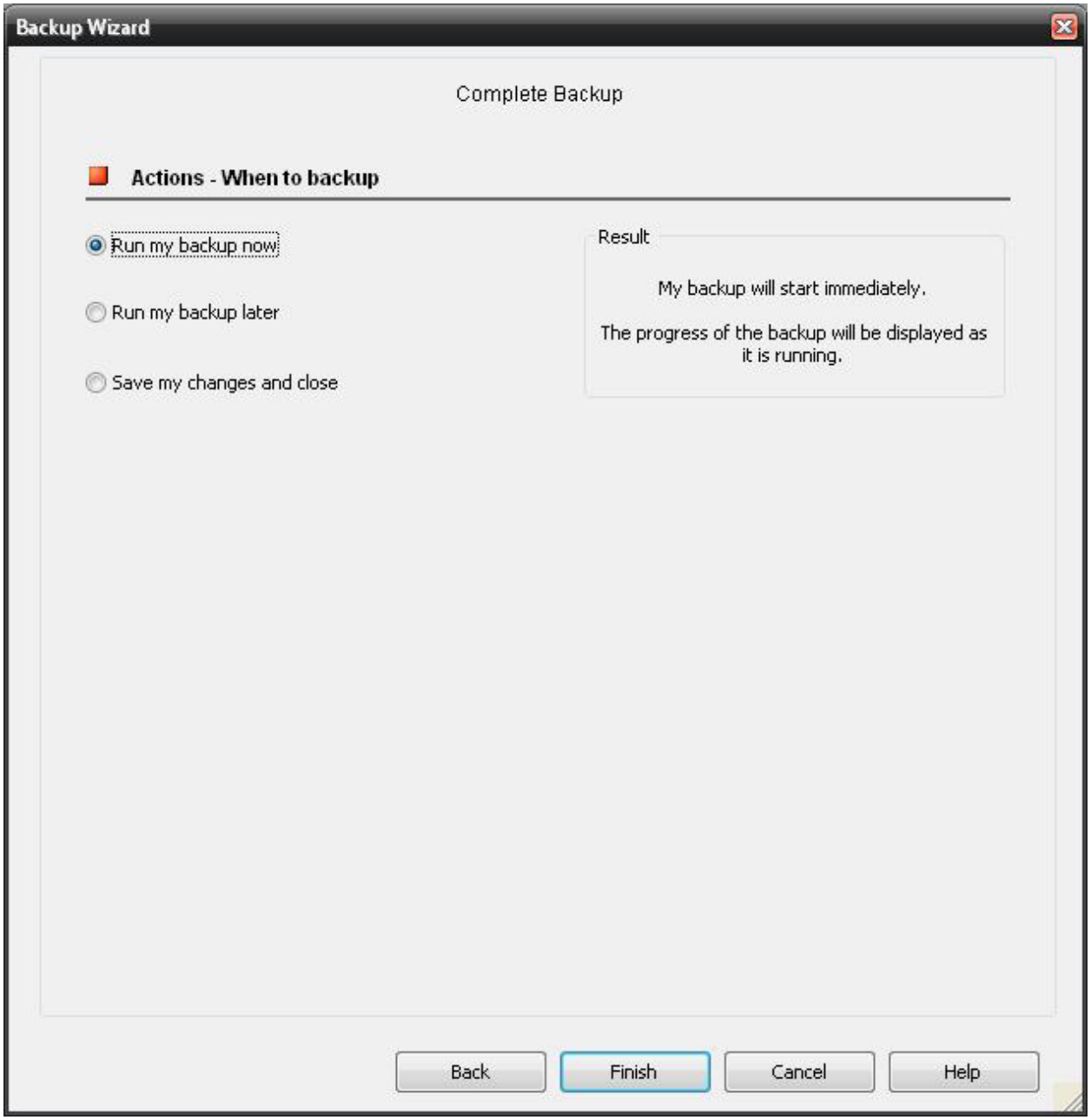
In this section you may choose to backup every file that is selected or only files that have been marked as changed. If unsure which to choose then consider the typical approach to run one full backup and then run modified backups after that. This way every file is initially backed up as well as the latest version of any file that has changed since your full backup. If comparing these backup methods to those offered in the advanced view, note that the modified type is functionally the same as a differential backup type.

Storage - Where to backup

This is used to specify where to store the backup. Click the "Backup to..." button to see the options available. Typical choices include local and external disk, CD/DVD/BD media and online which stores your files on a remote storage location.

Complete Backup

The Complete Backup screen provides the final step to run, save or schedule your default backup to run at a later time.



Run my backup now

Choose this option to run the backup as set in the previous screen. This will also cause those settings to be saved so they are in effect when running the scheduled backup or when clicking the "Refresh My Backup" panel.

Run my backup later

Choose this option to run the backup at a later time. This will display the scheduler settings and options.

Save my changes and close

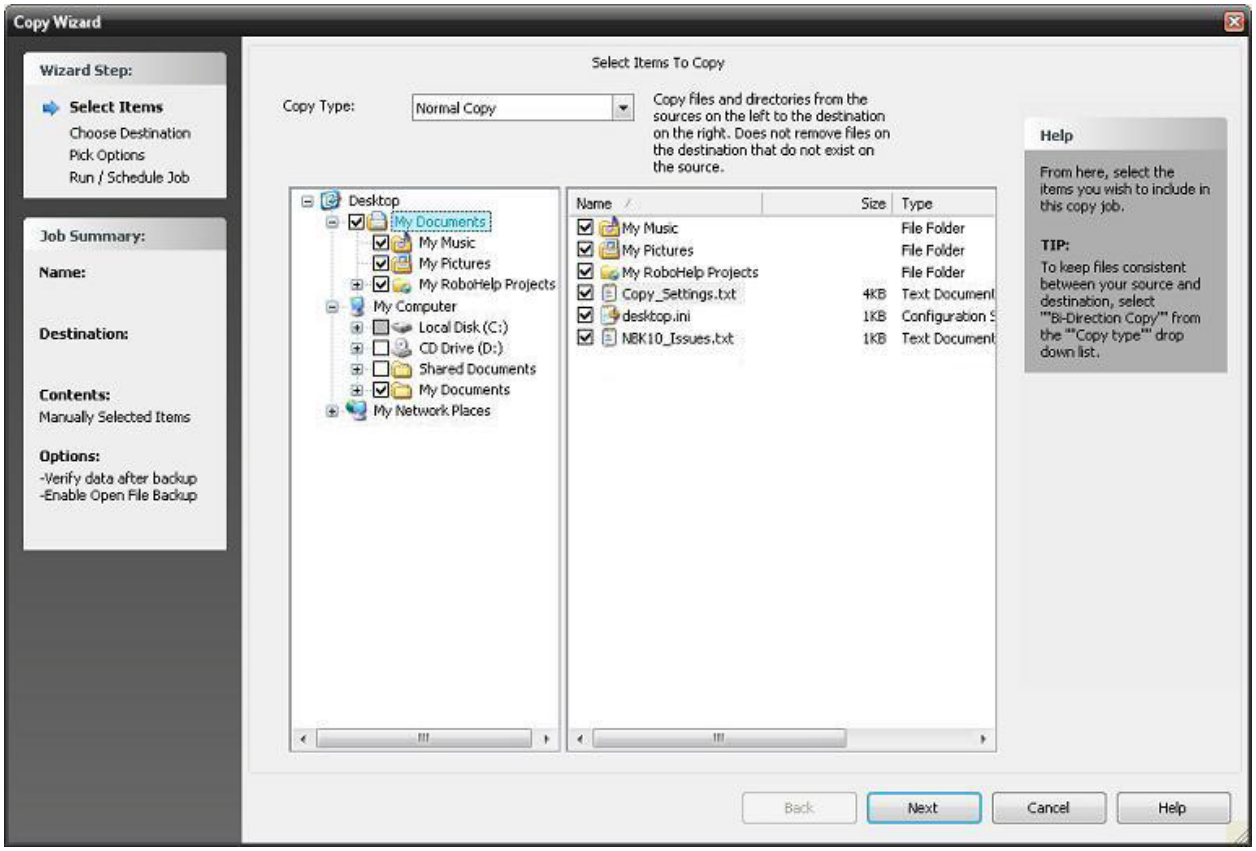
This option is useful in cases where settings have changed for the default backup in the previous screen, but you do not wish to actually run the backup now or change the time set for a scheduled backup to run.

Copy

Select Items to Copy

This screen will allow you to select the files/folders that you would like to copy and the destination and type copy task you want to perform. Once you have completed your select, click "Next" to proceed to the Options screen.

What are copy jobs? *Copy jobs are combinations of directories and files that are selected as well as any of the options (including filters) that go along with that specific copy job. Copy jobs differ from backup jobs in that they result in the exact same set of files being "copied" or transferred to the destination device including: Hard Disk, Network Drive, CD or DVD, and online storage. Note: Copy jobs DO NOT permit the use of tape.*



"Copy Type" Button

Select the copy type you with to perform:

> ***"Copy"***
> Copy files and directories from the source(s) on the left to the destination or the right. Does not remove files on the destination that DO NOT exist on the source

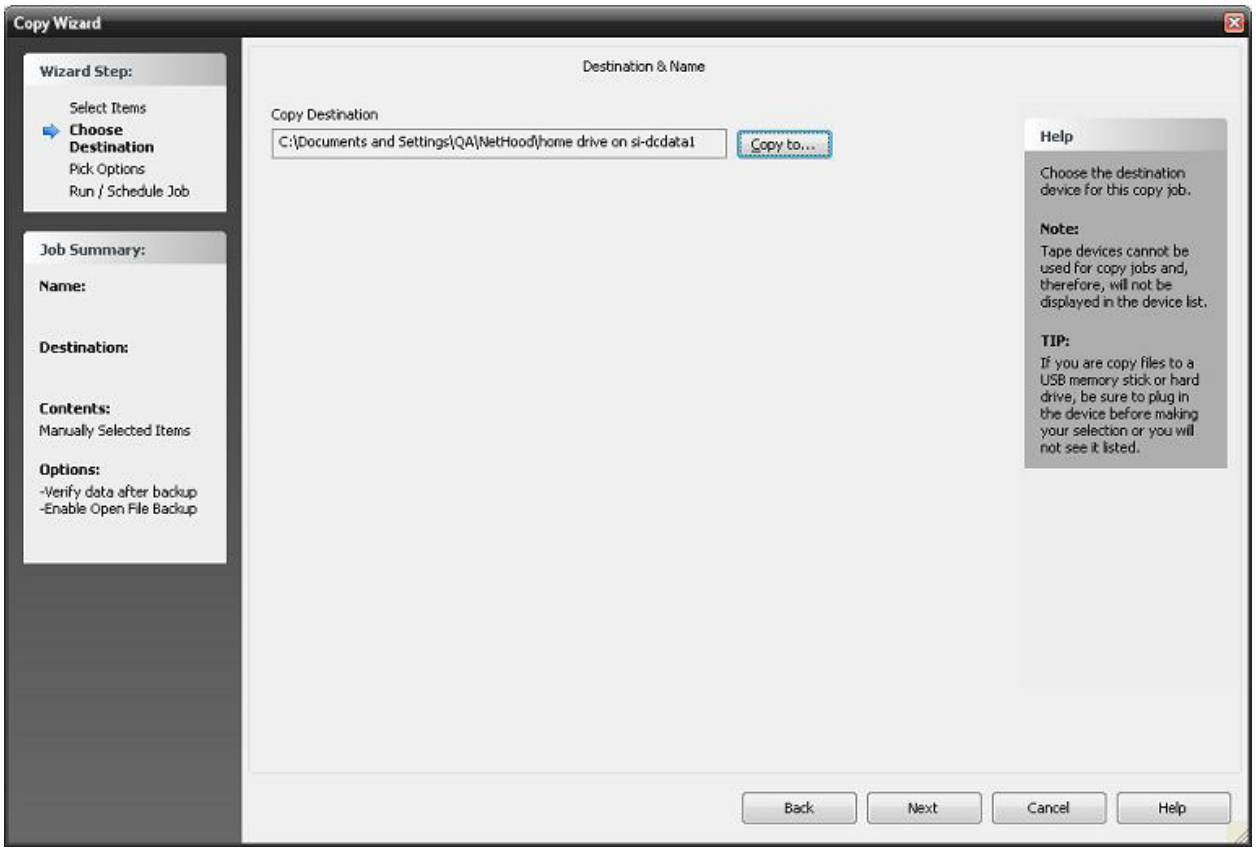
"Mirror"
Mirror files and directories from the source(s) on the left to the destination or the right. REMOVES files on the destination that DO NOT exist on the source

"Bidirectional Copy"
Copy files and directories between the left and the right paths. Results in an identical set of files and folders on both sides: Files on one side, but not the other are copied

Note: *Files that have been deleted from one path will NOT be deleted from the other*

Copy Destination

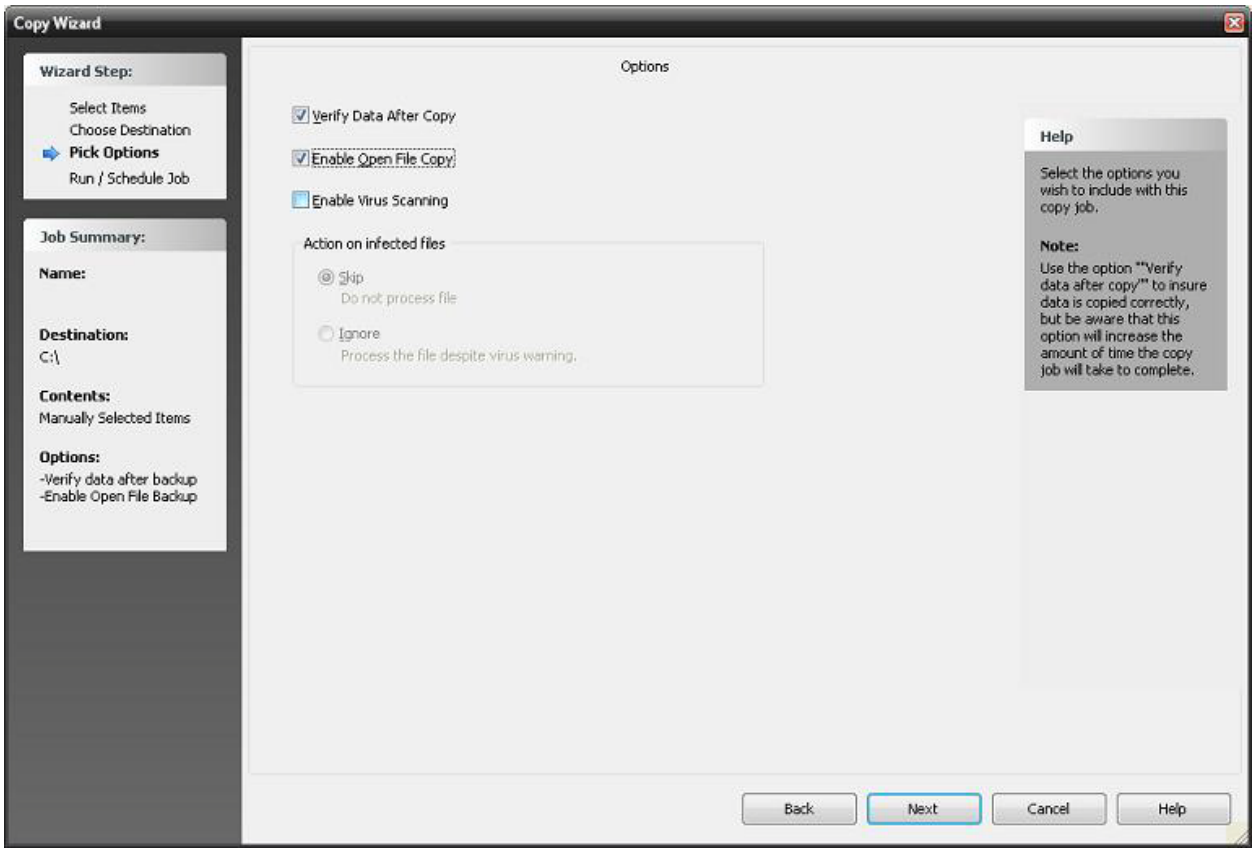
With this screen, you can designate the destination for the copy job



.

Select Copy Options

This screen allows you select options for your Copy job.



Verify Data After Copy

This option allows NovaBACKUP to read the copied data to verify its integrity after the copy task is completed. This verification process will increase the amount of time required to complete the copy task. However, this process helps to ensure that the data was copied successfully.

It is highly recommended to select the option to verify your data. This helps to ensure that the copied data matches the data presently on your system. If you do not select this option, and there is an error in some of your copied data, the data may be corrupted when you attempt to access it.

Enable Open File Copy

Select this option to have NovaBACKUP automatically copy open files on the local system using Microsoft's Volume Snapshot Service (VSS).

Note: *This option is NOT available when running on Windows 2000.*

Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system. To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to copied. This is the default selection.

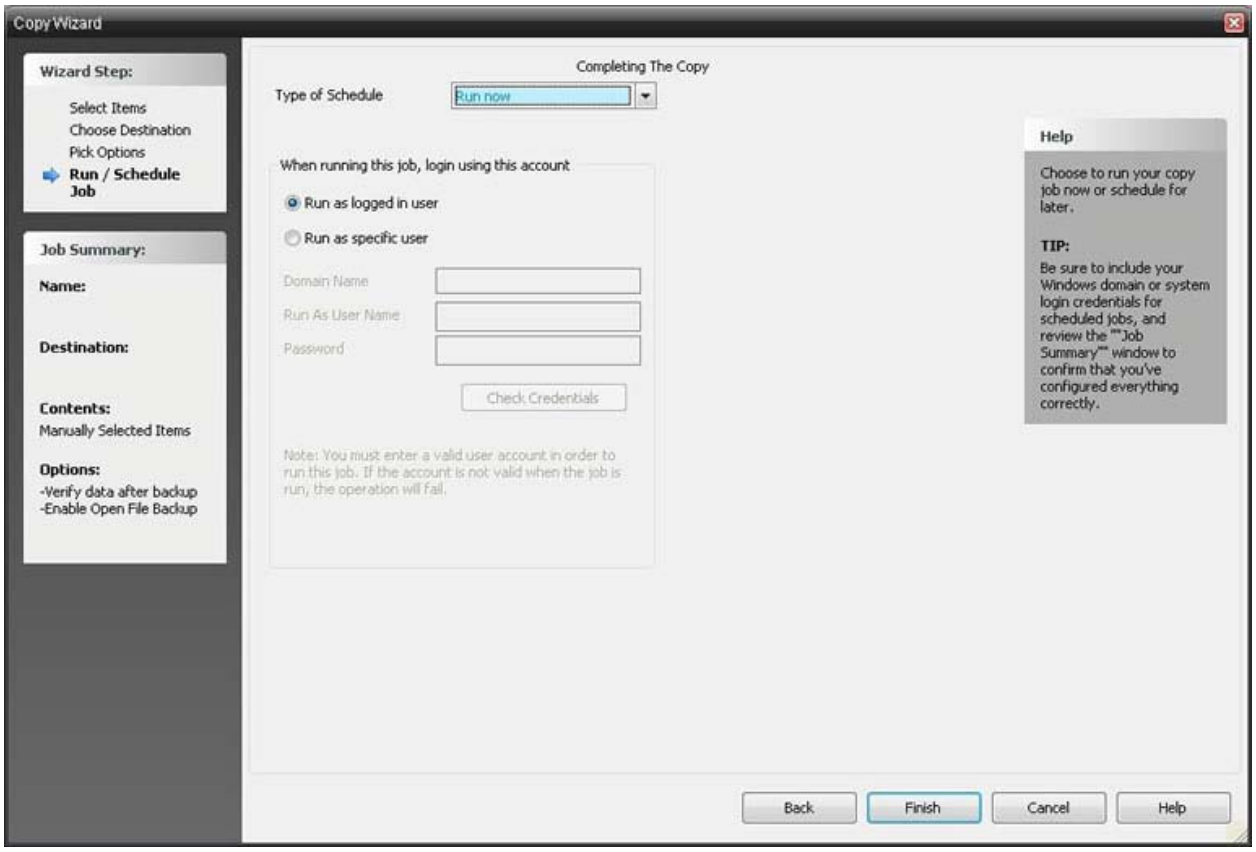
Ignore-This option allows the files that have virus warnings to copied.

Overview of Copy Settings

This screen shows you an overview of your Backup Settings. It describes the copy task you have just created.

Completing the Copy Job

From here, select whether to run the copy job now or schedule it to run in the future


Copy Wizard
Wizard Step:
Select Items
Choose Destination
Pick Options
Run / Schedule Job
Job Summary:
Name:
Destination:
Contents:
Manually Selected Items
Options:
-Verify data after backup
-Enable Open File Backup
Completing The Copy
Type of Schedule
Run now
When running this job, login using this account
Run as logged in user
Run as specific user
Domain Name
Run As User Name
Password
Check Credentials
Note: You must enter a valid user account in order to run this job. If the account is not valid when the job is run, the operation will fail.
Help
Choose to run your copy job now or schedule for later.
TIP:
Be sure to include your Windows domain or system login credentials for scheduled jobs, and review the ""Job Summary"" window to confirm that you've configured everything correctly.
Back
Finish
Cancel
Help

Type of Schedule

This drop-down list allows you to select whether you want the copy job to run once, run by the minute, hourly, daily, weekly, or monthly.

Run Now: Run the job every so many minutes/seconds. Under "Scheduling Information", select the appropriate date and time you want the job to run

Minute: Run the job based on a minute/second increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of minutes and seconds between each run.

Hourly: Run the job based on an hourly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of hours you want the job to repeat.

Daily: Run the job based on an daily increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of days you want the job to repeat. You can also select specific days to run or not run the job.

Weekly: Run the job based on an weekly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of weeks you want the job to repeat.

Monthly: Run the job based on an monthly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start, and the day of the month and number of months you want the job to repeat.

Job Name (When scheduling the job)

This allows you to select the job that you would like to run. Click on the "Browse..." button next to the text box to see a list of all saved backup and copy job scripts.

Run Job As . .

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

In order for the job to run, you must enter in valid windows account details.

Domain Name: The domain name you are logging into.

Run as User Name: The user name you want the job to run as.

Password: The password for the account you want the job to run as.

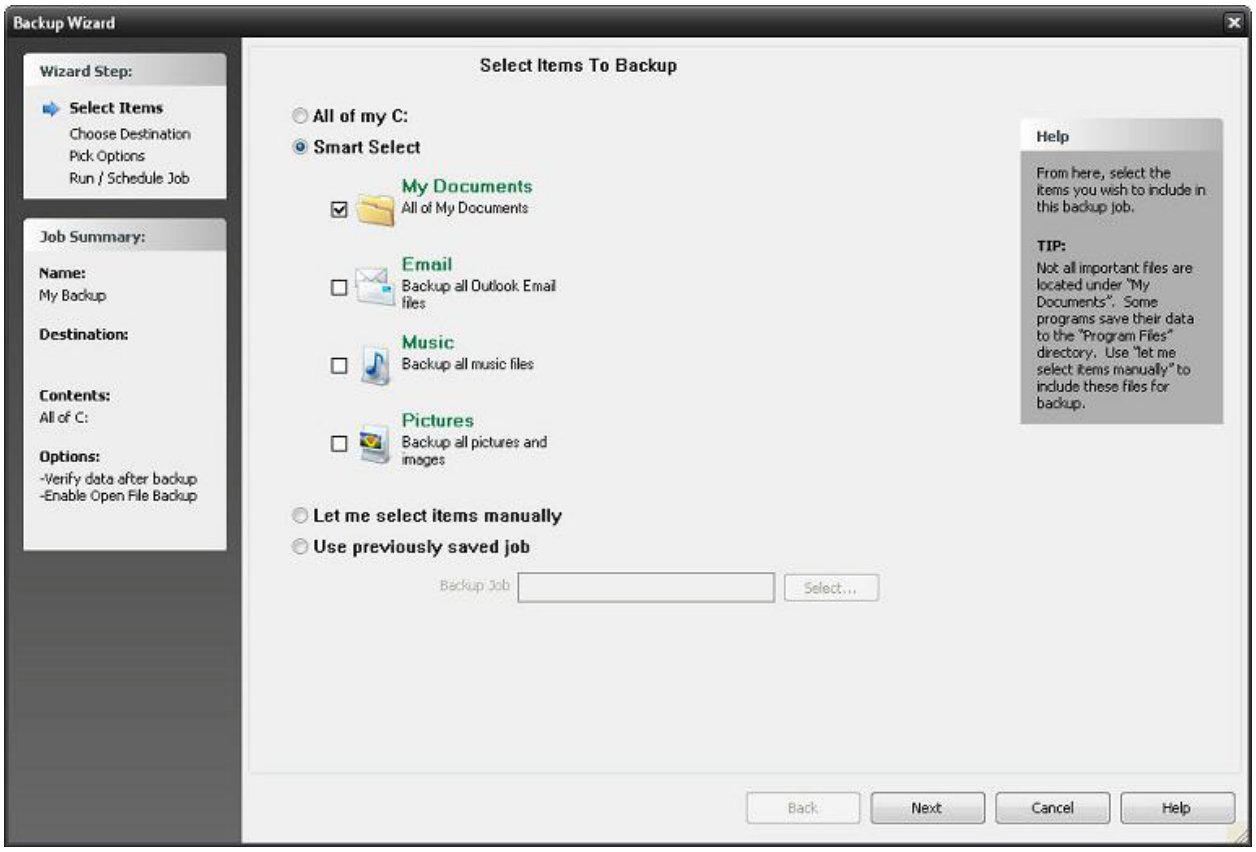
Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: You must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

Backup

Select Items to Backup

This screen will allow you to select the files/folders that you would like to backup. Once you have completed your selection, click "Next" to proceed to the next screen.



All of my C:

This will back up of all of the content of your C: drive.

Note: that if you have a partitioned hard drive with both a C: and an additional drive letter, this setting will only backup the content of your C: drive.

All of My Documents

This will backup all files and folders that are stored in your My Documents directory.

Let Me Select Items Manually

This option allows you to manually select the files and/or folders that you would like included in the backup job. This selection will take you to the "Select Items to Backup" screen that is described in the next section.

Disaster Recovery Backup

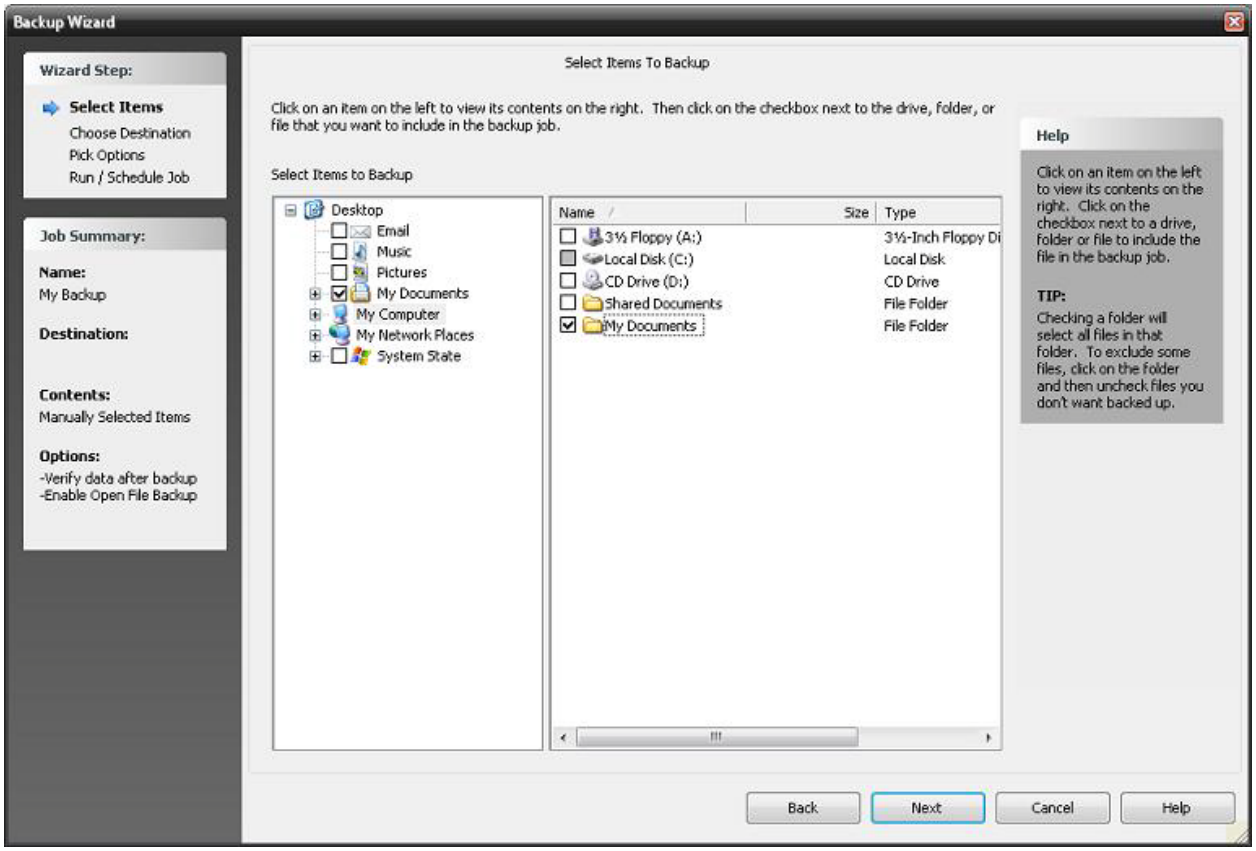
Choose this option to make a Disaster Recovery Compliant Backup. This will automatically select critical files for backup in addition to your own file selections.

Use Previously Saved Script

This option allows you to select a previously saved backup job for use in the Wizard.

Select Items Manually Backup

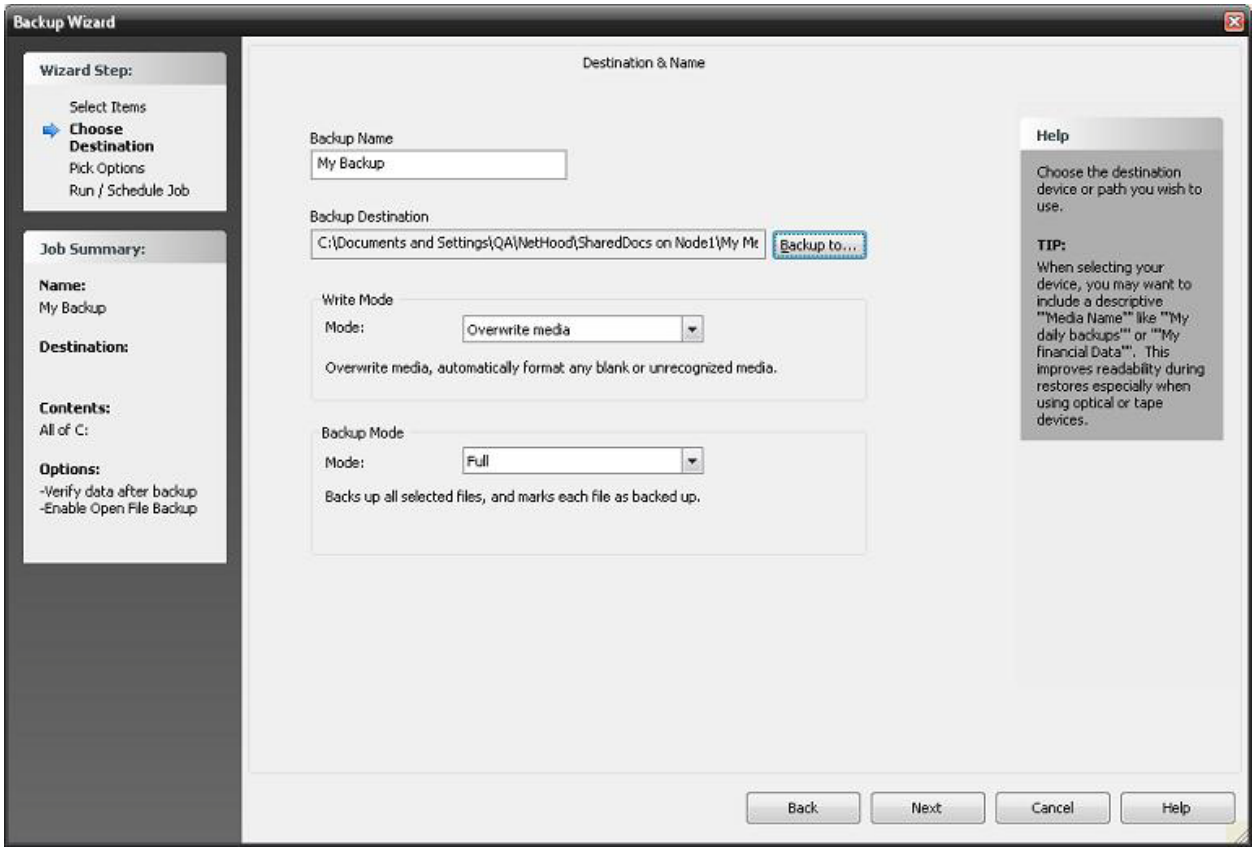
This screen will allow you to select the files and or/folders that you would like included in the current backup set.



Clicking on a checkbox next to a file, folder or a drive will select or unselect that respective file, folder or drive. There are five checkbox states: gray, white, white with a blue check, white with a gray check and gray with a gray check. For more information on refer to the Files and Folders Selections section.

Destination & Name

With this screen, you can designate the name and destination for the backup.



Backup Name

Typing a name for the backup is required and is used as the description for the backup task as well as the script name upon which the job is saved. The default name specified is "My Backup"

Backup Destination

This allows you to set the backup device/path to be used for your backups. To select your backup destination, click on the "Backup To" button.

Backup Type

Here, you can select the type of backup you want to create:

Full

Backs up all selected files, and marks each file as backed up. This is the default setting.

Incremental

Backs up (and marks as backed up) selected files that have either not been backed up previously or have changed.

Differential

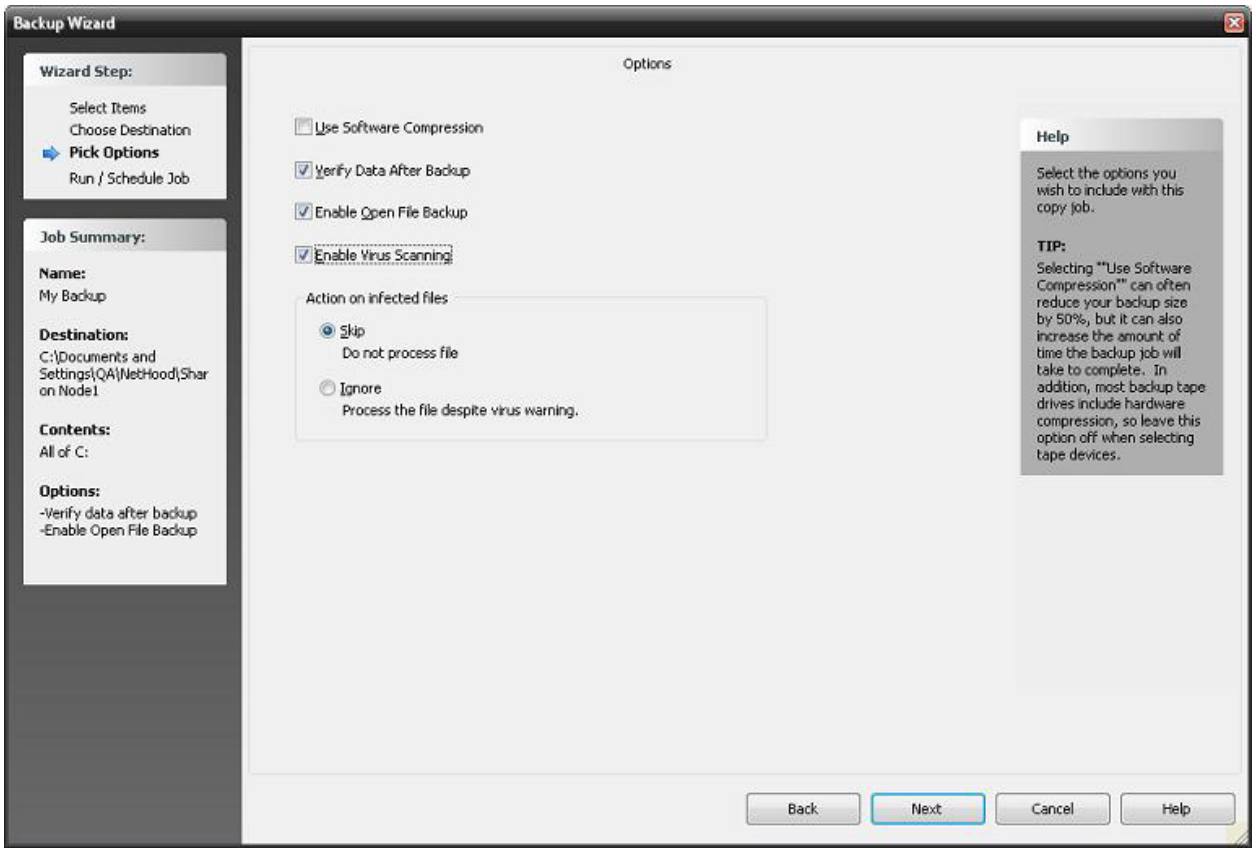
Backs up selected files that have either not been backed up previously or have changed. These backed up files are not marked as backed up, however.

Snapshot

Backs up all selected files and does not mark any files as backed up.

Select Backup Options

This screen allows you select options for your backup job.



Use Software Compression

Software compression allows the backup files that are created to take up less storage space and at the same time include the integrity of an uncompressed backup. This will increase your available storage space on the backup media. However, using software compression may slightly increase the time needed to complete the backup process.

Note: If your backup device offers hardware-based compression, enabling software compression is not recommended because it will actually increase the files size to more than the original file size.

Verify Data After Backup

This option allows NovaBACKUP to read the backed up data to verify its integrity after the backup is completed. This verification process will add time needed to complete the backup process. However, this process helps to ensure that your backup was completed successfully.

It is highly recommended to select the option to verify your data after a backup. This helps to ensure that the backed up data matches the data presently on your system. If you do not select this option, and there is an error in some of your backed up data, there will be errors upon restoring that data if you should need to.

Enable Open File Copy

Select this option to have NovaBACKUP automatically copy open files on the local system using Microsoft's Volume Snapshot Service (VSS).

Note: *This option is NOT available when running on Windows 2000.*

Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system. To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to be backed up. This is the default selection.

Ignore-This option allows the files that have virus warnings to be backed up.

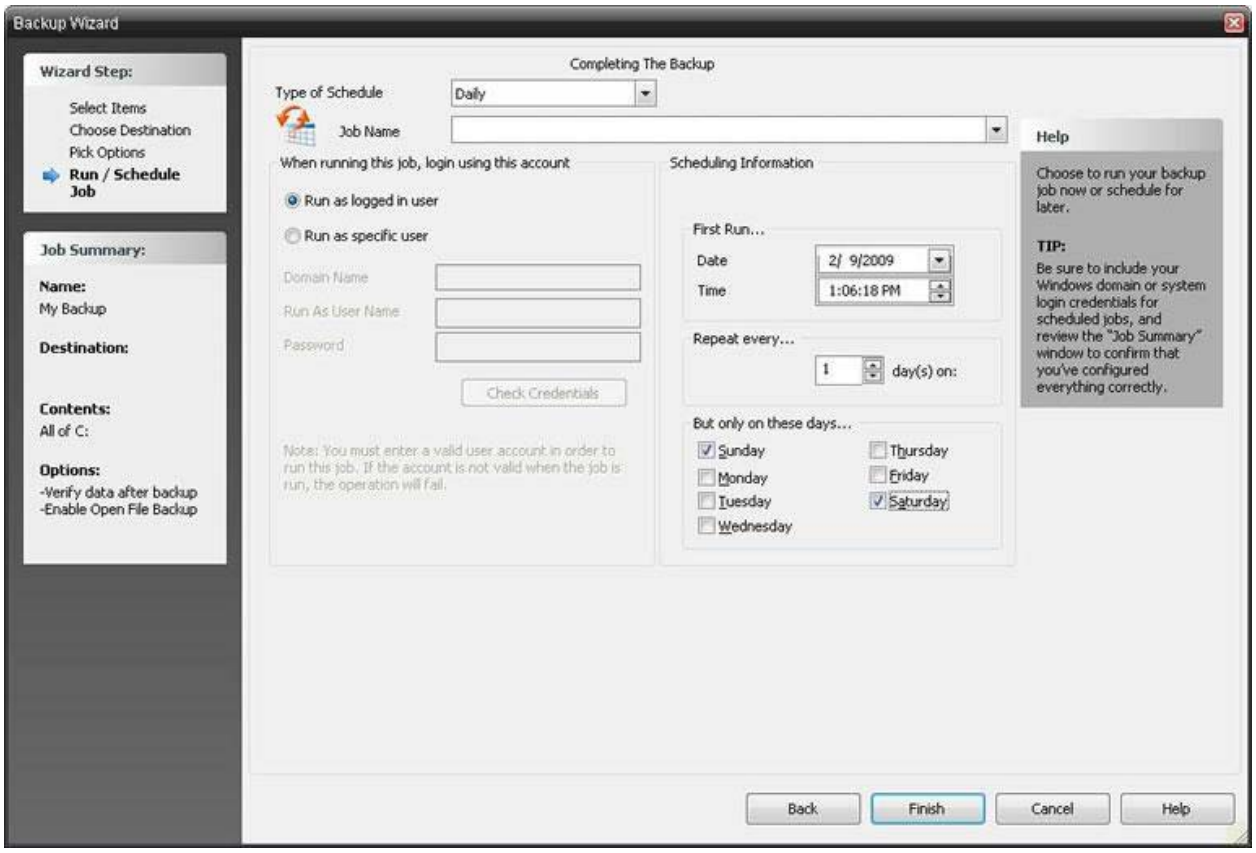
Overview of Backup Settings

This screen shows you an overview of your Backup Settings. It describes the backup job you have just created.

If the settings are correct, press "Next" to complete the restore job. If you need to make corrections, press the "Back" button

Completing the Backup Job

This is the final necessary screen when creating a backup set using the Wizard.



Type of Schedule

This drop-down list allows you to select whether you want the backup job to run immediately, once, by the minute, hourly, daily, weekly, or monthly.

Run Now: Run the job every so many minutes/seconds. Under "Scheduling Information", select the appropriate date and time you want the job to run

Minute: Run the job based on a minute/second increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of minutes and seconds between each run.

Hourly: Run the job based on an hourly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of hours you want the job to repeat.

Daily: Run the job based on an daily increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of days you want the job to repeat. You can also select specific days to run or not run the job.

Weekly: Run the job based on an weekly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of weeks you want the job to repeat.

Monthly: Run the job based on an monthly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start, and the day of the month and number of months you want the job to repeat.

Job Name (When scheduling the job)

This allows you to select the job that you would like to run. Click on the "Browse..." button next to the text box to see a list of all saved backup and copy job scripts.

Run Job As . .

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

In order for the job to run, you must enter valid windows account details.

Domain Name: The domain name you are logging into.

Run as User Name: The user name you want the job to run as.

Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: You must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

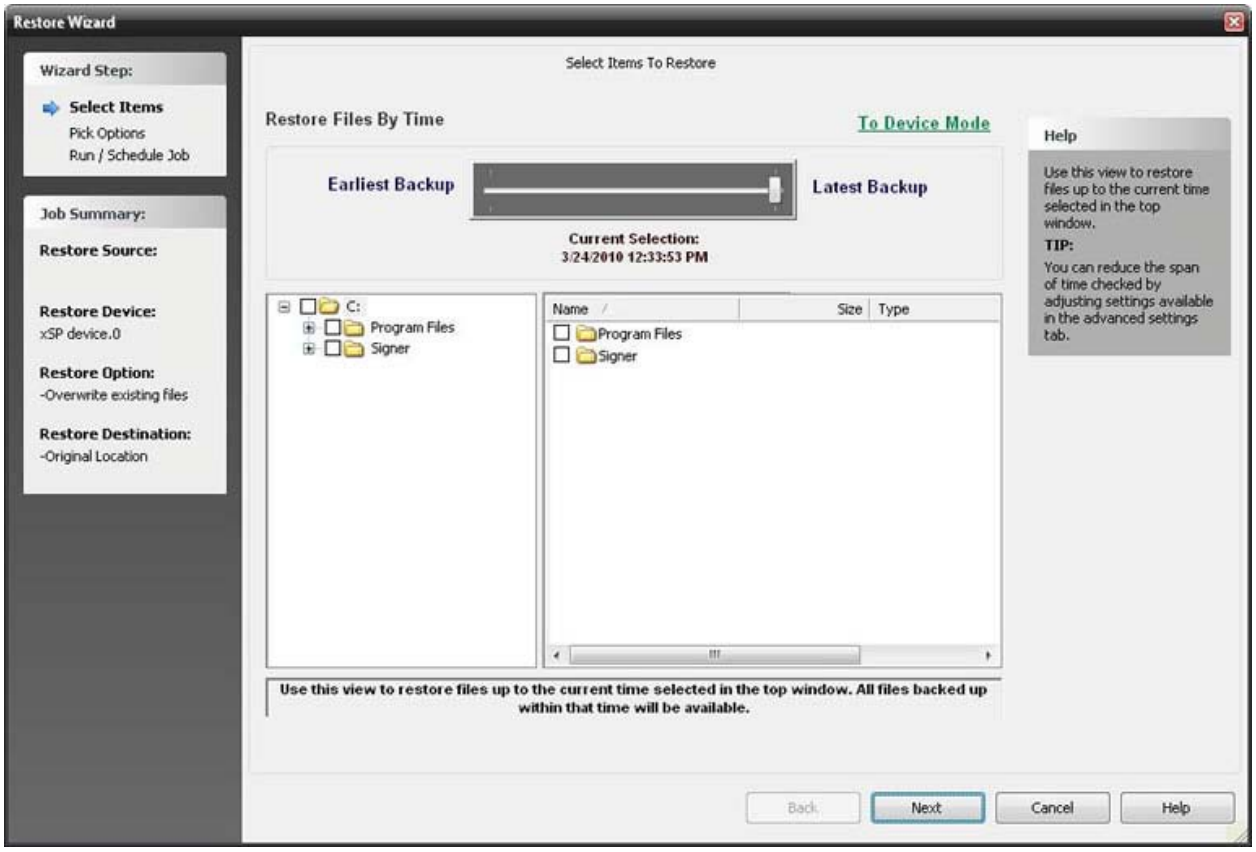
Restore

Select Items to Restore

On this screen, select all files from previous backups that you can restore your files or system from.

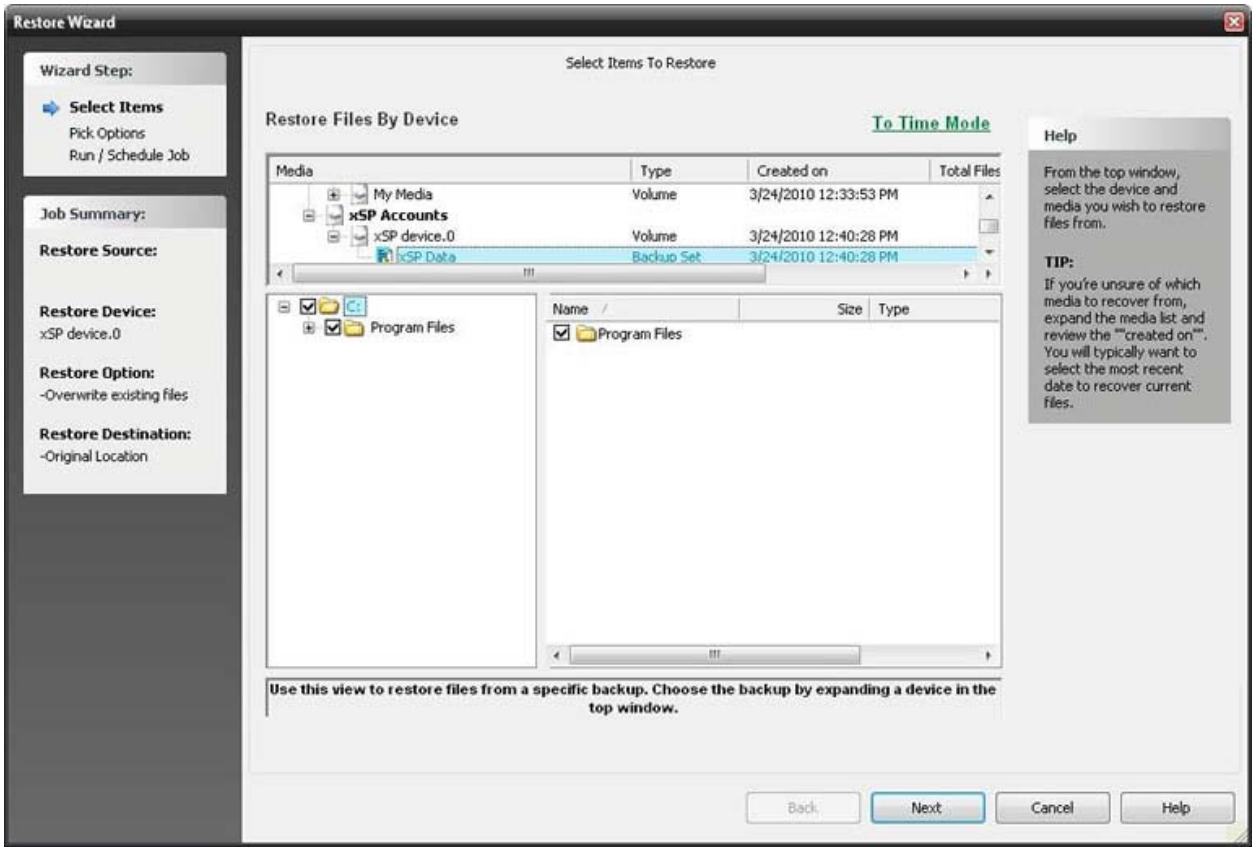
Restore Files By Time

This 'TimeSlider' view uses a patent pending technology to provide a single restorable fileset without the need to select the backup source device. Using the slider, files are listed based on the range of time the backup has run.



Restore Files By Device

This view displays a restorable fileset contained in a specific backup. Use the device view in the upper window to select the location of the backup and the backup session containing the files available to restore.

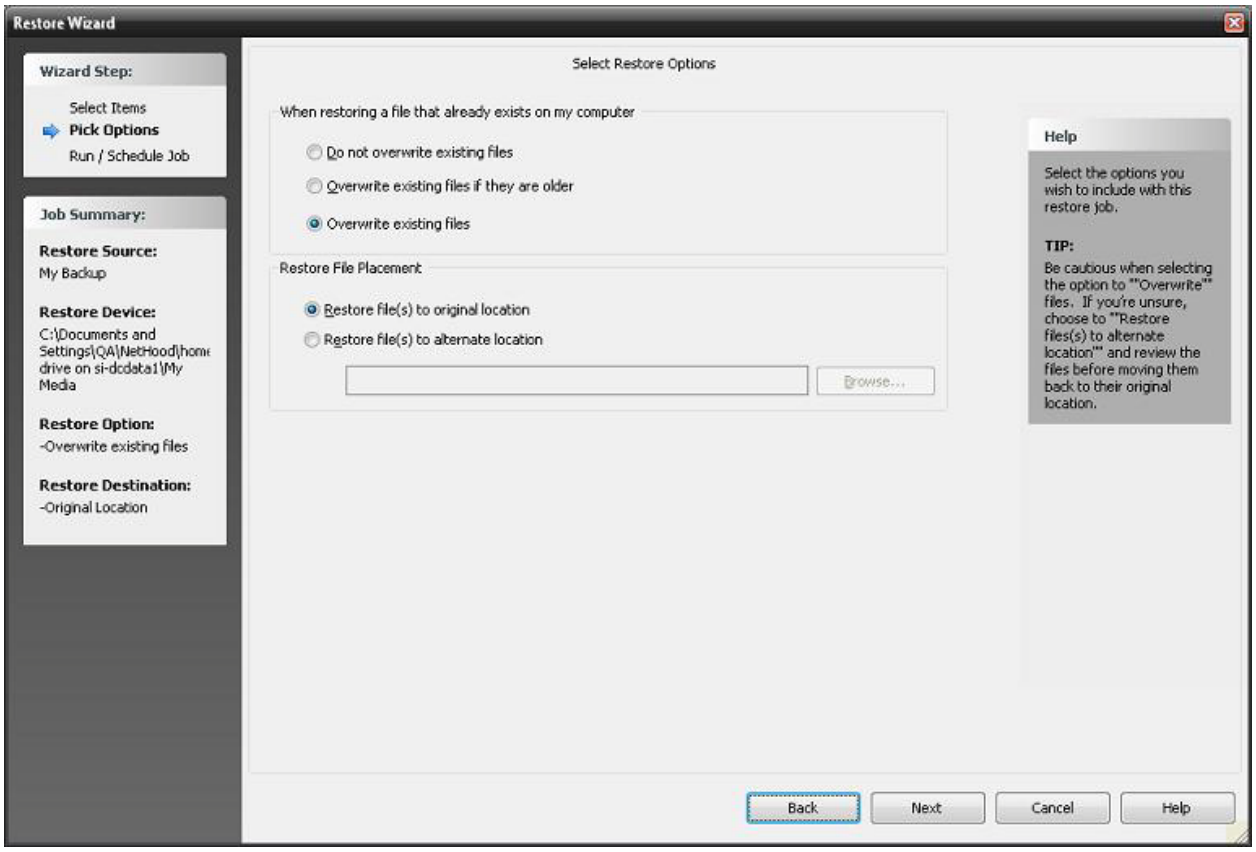


You will see a list of all available backup media from which you can restore from. If you do not see your backup media listed, you may need to import your backup set. See the "Importing a Backup Set." section for further information.

To restore the contents of the entire drive, place a check mark next to the drive. If you would like to restore specific files or folders, click to place a check mark in the box next to the specific files or folders you wish to restore.

Select Backup Options

This screen allows you select options for your restore job.


Restore Wizard
Wizard Step:
Select Items
Pick Options
Run / Schedule Job
Job Summary:
Restore Source:
My Backup
Restore Device:
C:\Documents and Settings\QA\NetHood\home drive on si-dcdata1\My Media
Restore Option:
-Overwrite existing files
Restore Destination:
-Original Location
Select Restore Options
When restoring a file that already exists on my computer
Do not overwrite existing files
Overwrite existing files if they are older
Overwrite existing files
Restore File Placement
Restore file(s) to original location
Restore file(s) to alternate location
Browse...
Help
Select the options you wish to include with this restore job.
TIP:
Be cautious when selecting the option to "Overwrite" files. If you're unsure, choose to "Restore files(s) to alternate location" and review the files before moving them back to their original location.
Back
Next
Cancel
Help

Restore Device

This is the device used for the restore based on the media selected previously. You can change the restore device by click "Restore from. . ."

Note: If you make a change to the restore device, you restore may fail if the correct media is not available using the selected device

Overwrite Options

This allows you to set the backup device/path to be used for your backups. To select your backup destination, click on the "Backup To" button.

Do not overwrite existing files: Does not overwrite files regardless of whether they are older or newer

Overwrite existing files if they are older: Only overwrites files that already exist by are older than the files being restored

Overwrite existing files: Overwrites all files regardless of whether they are older or newer

Restore File Placement

Restore file(s) to original location: Restores all files to the original location they were backed up from

Restore file(s) to alternate location: Allows you to select a different path to restore files to rather than the original location they were backed up from

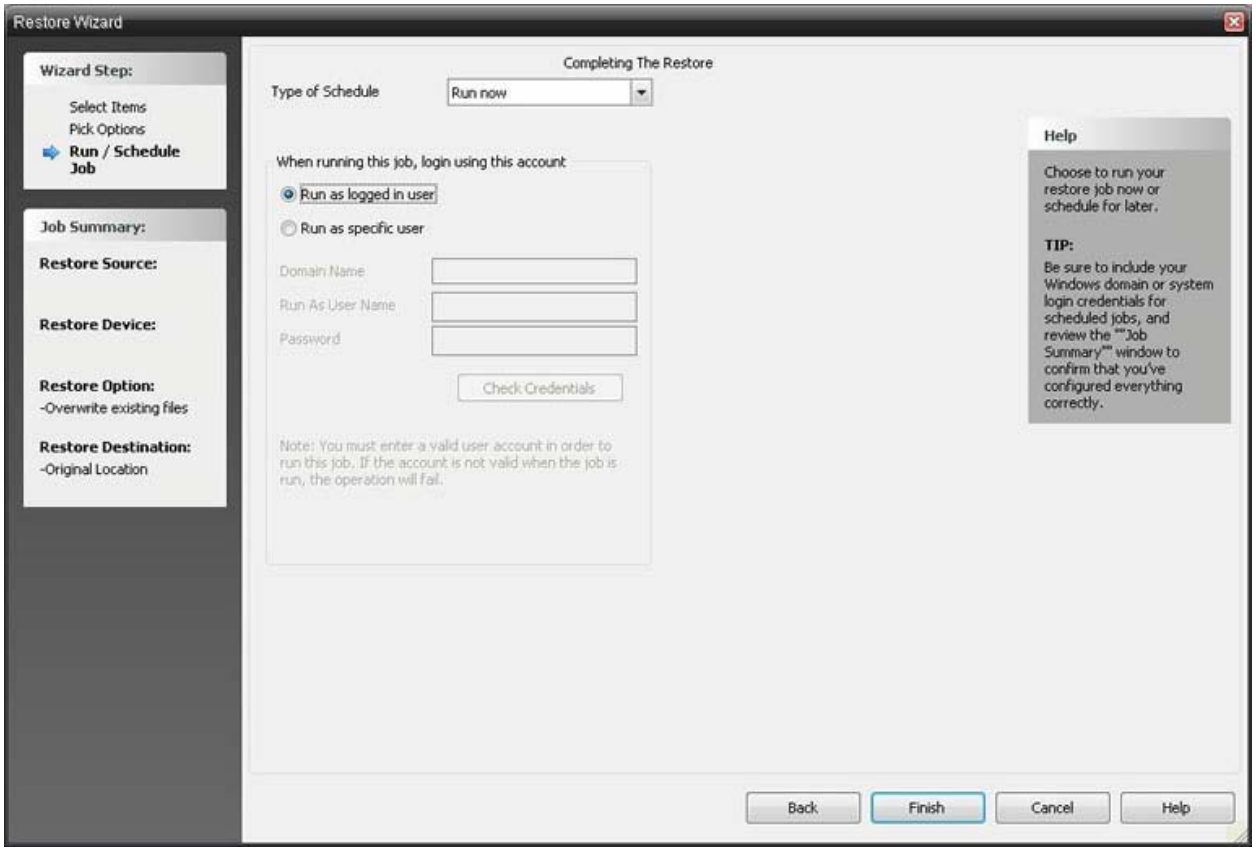
Overview of Restore Settings

This screen shows you an overview of your Restore settings. It describes the restore job you have just created.

If the settings are correct, press "Next" to complete the restore job. If you need to make corrections, press the "Back" button

Completing the Restore Job

This is the final necessary screen when creating a restore job using the Wizard.


Restore Wizard
Wizard Step:
Select Items
Pick Options
Run / Schedule Job
Job Summary:
Restore Source:
Restore Device:
Restore Option:
-Overwrite existing files
Restore Destination:
-Original Location
Completing The Restore
Type of Schedule
Run now
When running this job, login using this account
Run as logged in user
Run as specific user
Domain Name
Run As User Name
Password
Check Credentials
Note: You must enter a valid user account in order to run this job. If the account is not valid when the job is run, the operation will fail.
Help
Choose to run your restore job now or schedule for later.
TIP:
Be sure to include your Windows domain or system login credentials for scheduled jobs, and review the ""Job Summary"" window to confirm that you've configured everything correctly.
Back
Finish
Cancel
Help

Type of Schedule

This drop-down list allows you to select whether you want the restore job to run immediately, once, by the minute, hourly, daily, weekly, or monthly.

Run Now: Run the job every so many minutes/seconds. Under "Scheduling Information", select the appropriate date and time you want the job to run

Minute: Run the job based on a minute/second increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of minutes and seconds between each run.

Hourly: Run the job based on an hourly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of hours you want the job to repeat.

Daily: Run the job based on an daily increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of days you want the job to repeat. You can also select specific days to run or not run the job.

Weekly: Run the job based on an weekly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start and the number of weeks you want the job to repeat.

Monthly: Run the job based on an monthly increment starting on a specific date/time. Under "Scheduling Information", select the appropriate date and time the job is to start, and the day of the month and number of months you want the job to repeat.

Job Name (When scheduling the job)

This allows you to select the job that you would like to run. Click on the "Browse..." button next to the text box to see a list of all saved job scripts.

Run Job As

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

In order for the job to run, you must enter valid windows account details.

Domain Name: The domain name you are logging into.

Run as User Name: The user name you want the job to run as.

Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: You must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

Disaster Recovery

Launching Disaster Recovery

The Disaster Recovery Job Launcher is used to start any of the types of jobs available for complete system backup and recovery. Detailed help may then be reached by clicking the question mark in the upper right corner then clicking on any item on the screen for help. Help for scheduling is available here.

To run any of the jobs shown, click on the name of the desired job type then click the Open button. For each job you will be guided through a series of steps to complete that job.

Run Backup or Create Script

This is used to configure and run a disaster recovery backup. It also may be used to generate a backup script which then can be used to schedule the backup to run later. Note that disaster recovery backups differ from normal backups since you may only select an entire drive or its partitions for backup.

Schedule a Script

This is used to specify when to run a backup in the future. The backup to run at the designated time will be defined by selecting a backup script that was created using "Run Backup or Create Script".

Create Boot Media

This is used to create a boot CD or bootable flash drive. You can use this boot media to start your computer and optionally restore from a disaster recovery backup. This is especially useful if your computer does not start up successfully.

Restore

This is used to restore your computer from a disaster recovery backup.

Verify a Backup

This is used to verify that a disaster recovery backup is in fact readable and suitable for running a disaster recovery restore.

System State Backup and Restore

File Selection, System State & Registry

Overview

Security Information Backups

Depending on your system configuration, you can have special security configurations for files, drives and/or subdirectories. NovaBACKUP has full support for this information. This data is backed up each time you backup your registry. Please note that this information will ONLY be restored if you restore your registry, it is not stored on a file-by-file basis due to potential security issues.

Details on Backing Up System State Data

System state data is comprised of the following files:

- Boot files, including the system files, and all files protected by Windows File Protection (WFP).
- Active Directory (on a domain controller only).
- Sysvol (on a domain controller only).
- Certificate Services (on certification authority only).
- Cluster database (on a cluster node only).
- The registry.
- Performance counter configuration information.
- Component Services Class registration database.

The system state data can be backed up in any order. Restoration of the system state replaces boot files first and commits the system hive of the registry as a final step in the process.

System state backup and restore operations include all system state data: you cannot choose to backup or restore individual components due to dependencies among the system state components. However, you can restore system state data to an alternate location in which only the registry files, Sysvol directory files, and system boot files are restored. The Active Directory database, Certificate Services database, and Component Services Class Registration database are not restored to the alternate location.

You cannot change which components of the system state are backed up.

NOTE: *If you have more than one domain controller in your organization and Active Directory is replicated to any of these other servers, you might have to authoritatively restore any Active Directory data that you want to restore.*

For more information about authoritative restores, see the Microsoft® Windows® 2000/2003 Server Resource Kit Distributed Systems Guide.

Keep the following in mind when you are backing up system state data:

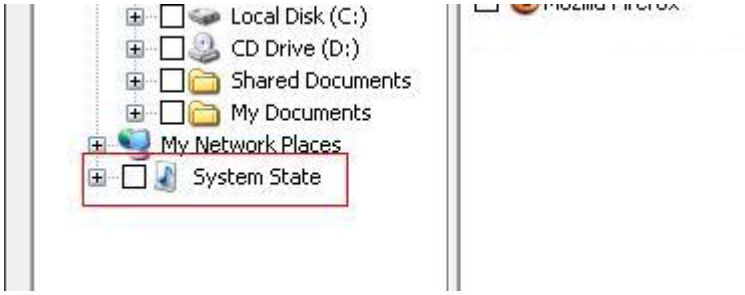
1. *You must be an administrator or a backup operator to back up files and folders.*
2. *You can only back up the system state data on a local computer. You cannot back up the system state data on a remote computer.*

To select files to be backed up from other PCs on a peer to peer network, once you click on Backup, in the left window click the plus sign next to My Network Places. Then click on Entire Network, and click on Microsoft Windows Network. There, you should find the other PCs.

To backup to a network device, it is recommended that you select the UNC path and not the mapped drive letter. Example \\server\path and not use a drive mapping (S:\path)

Registry & System State Backup

In Windows® 2000, Windows® 2003, Windows® XP and Windows® Vista, you have the option to backup the System State with a backup. The System State will be seen as an item in the selection window while you are selecting other files and folders from the Backup Tab. All you need to do to backup the System State is to tag the checkbox next to it prior to running the backup.



What is the System State? *The System State is actually a combination of a few things:*

- *Boot files, including the system files, and all files protected by Windows File Protection (WFP).*
- *Active Directory (on a domain controller only).*
- *Sysvol (on a domain controller only).*
- *Certificate Services (on certification authority only).*
- *Cluster database (on a cluster node only).*
- *The registry.*
- *Performance counter configuration information.*
- *Component Services Class registration database.*

These are the items seen in the right selection window when System State is selected.

Does NovaBACKUP support backing up Active Directory? *Yes, in fact, NovaBACKUP features include the ability to backup Active Directory when you are backing up the System State.*

System State backup and restore operations include all System State data. You cannot choose to back up or restore individual components because of dependencies among the System State components. However, you can restore System State data to an alternate location in which only the registry files and system boot files are restored. The Component Services class registration database is not restored to the alternate location.

Program Settings

Program Settings

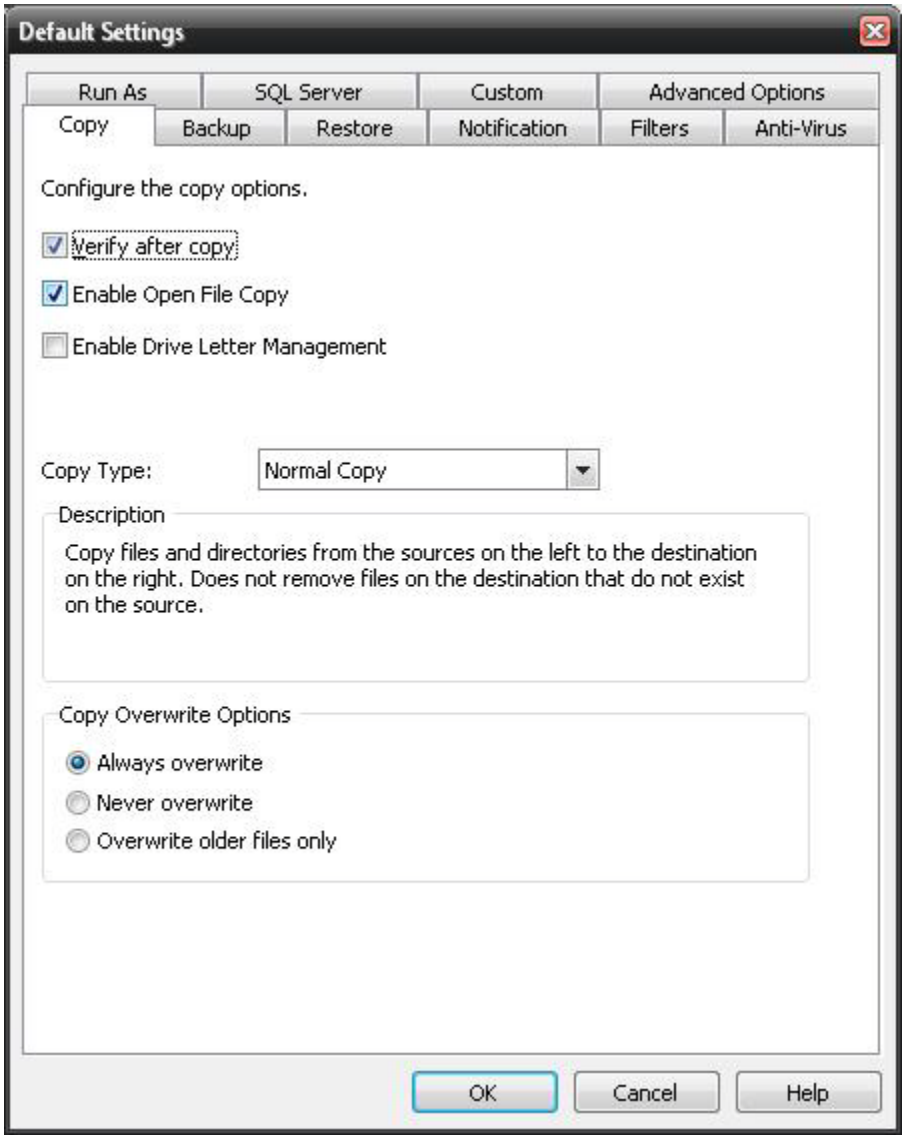
There are options in NovaBACKUP. To access the global options for all tasks, select the Global Settings Shortcut on the Home screen. To access options for individual tasks, you may press the "Settings" button on the Copy, Backup or Restore Tab to set options for that specific task.

Once you select the program options window, you will see ten tabs, each with different group of configuration settings. Each of these tabs and their available options are discussed in the following sections. After configuring the options, be sure to press the "OK" button at the bottom of the options window to confirm and apply the new settings. If you do not want to save these changes, simply press the "Cancel" button to return to NovaBACKUP without saving the new settings.

Note: *The settings defined from in Global Settings are overridden by settings defined from the individual task settings.*

Default Settings Tabs

Copy Tab



Verify after copy

The files that are copied will be verified to make sure that they were written correctly. Selecting this option will increase copy time. This setting is selected by default.

It is highly recommended to select the option to verify your data after a copy job. This helps to ensure that the copied data matches the data presently on your system. If you do not select this option, and there is an error in some of your copied data, you will not be aware of the errors until you go to access the copied data.

Enable Open File Copy
Select this option to have NovaBACKUP automatically copy open files on the local system using Volume Snapshot Service (VSS).
Note: This option NOT available when running on Windows 2000.

Enable Drive Letter Management
Select this option to have NovaBACKUP automatically select the correct removable disk device (USB) even when it's drive letter changes.

Copy Type

"Copy"
Copy files and directories from the source(s) on the left to the destination or the right. Does not remove files on the destination that DO NOT exist on the source

"Mirror"
Mirror files and directories from the source(s) on the left to the destination or the right. REMOVES files on the destination that DO NOT exist on the source

"Bidirectional Copy"
Copy files and directories between the left and the right paths. Results in an identical set of files and folders on both sides: Files on one side, but not the other are copied

Note: *Files that have been deleted from one path will NOT be deleted from the other*

Copy Overwrite Options

Always Overwrite

Source file will always overwrite an existing file of the same name on the destination.

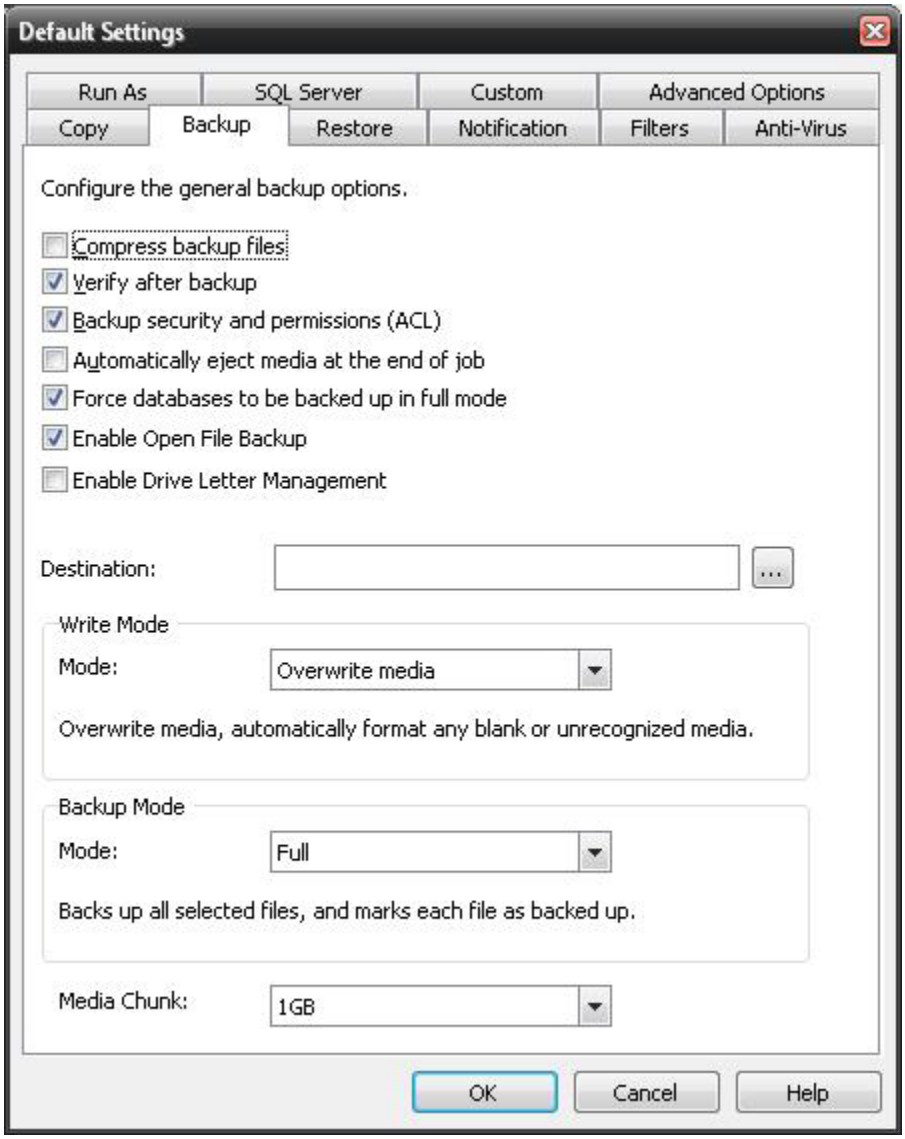
Never Overwrite

Source file will never overwrite an existing file of the same name on the destination.

Overwrite older files only

Source file will overwrite an existing file of the same name on the destination if the destination file is older.

Backup Tab



Compress backup files

The backup files are compressed to save space. Backup speed is increased when this option is selected. This setting is selected by default.

Verify after backup

The files that are backed up will be verified to make sure that they were written correctly. Selecting this option will increase backup time. This setting is selected by default.

It is highly recommended to select the option to verify your data after a backup. This helps to ensure that the backed up data matches the data presently on your system. If you do not select this option, and there is an error in some of your backed up data, there will be errors upon restoring that data if you should need to.

Backup ACL File Permissions
Select this option to backup Access Control Lists (ACL's) in addition to file data. ACL's contain file and system permissions. This option should be enabled to maintain system security.

Automatically Eject Media. . .
Select this option to have NovaBACKUP automatically eject the media after a backup has completed (device must support media eject)

Force database to be backed up in full mode
Regardless of the backup type, always backup the NovaBACKUP database in full mode. This assures that it can be recovered quickly from a single backup rather than from multiple backups

Enable Open File Backup

Select this option to have NovaBACKUP automatically backup open files on the local system using Volume Snapshot Service (VSS).

Note: This option is NOT available when running on Windows 2000.

Enable Drive Letter Management
Select this option to have NovaBACKUP automatically select the correct removable disk device (USB) even when it's drive letter changes.

Destination

Select the default destination device a backup for all new backup jobs

Write Mode

Overwrite media:

Overwrite all recognized media. Automatically format blank or unrecognized media

Append to Media:

Append to recognized media. Automatically format blank or unrecognized media

Backup Mode

Full

Backs up all selected files, and marks each file as backed up. This is the default setting.

Incremental

Backs up (and marks as backed up) selected files that have either not been backed up previously or have changed.

Differential

Backs up selected files that have either not been backed up previously or have changed. These backed up files are not marked as backed up, however.

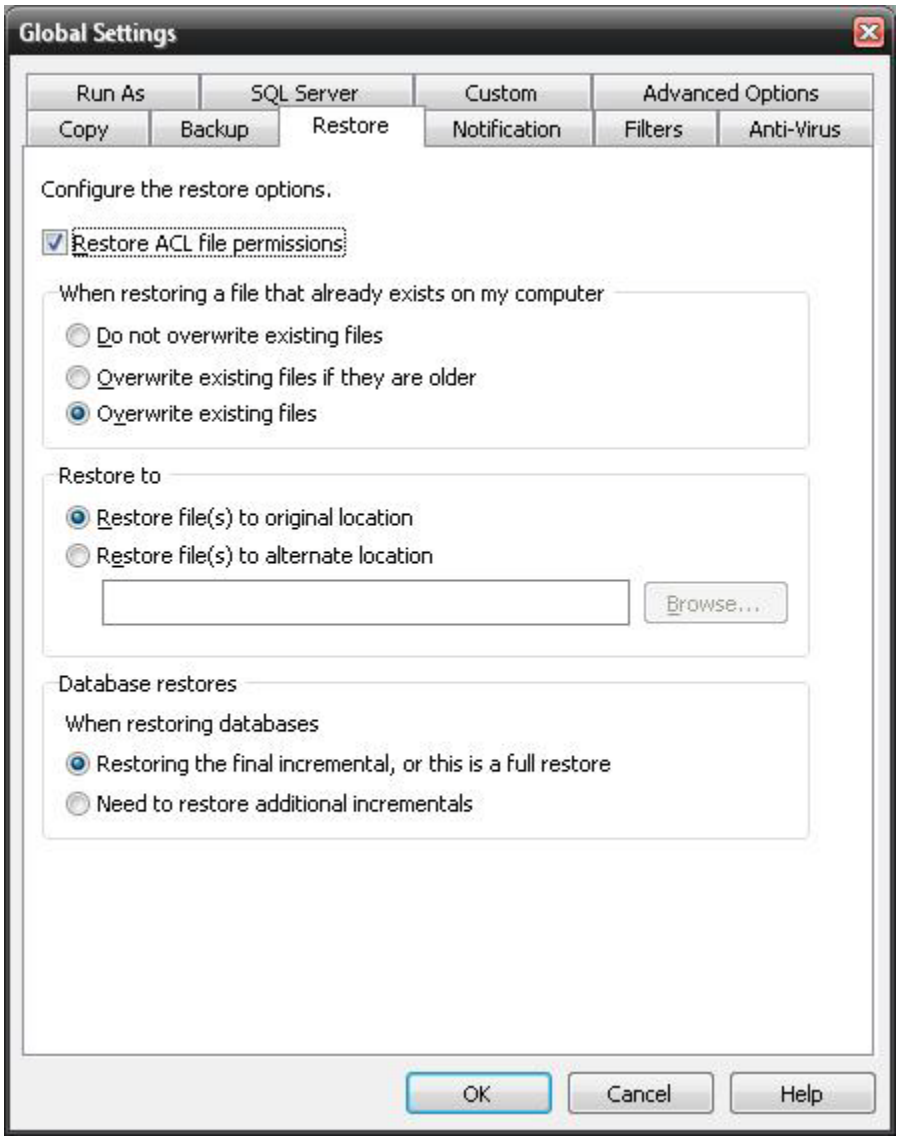
Snapshot

Backs up all selected files and does not mark any files as backed up.

Media Chunk

A chunk is a unit of backup data that is written to media. This value determines a what point the backup archive will be split into multiple files of the size selected. Note: This option does not apply to "tape" media.

Restore Tab



Restore ACL File Permissions

Select this option to restore security permissions on files and subdirectories. Note that the backup ACL's option must have been selected during the original backup for them to be restored.

Existing Files Options

The recommended setting is to not overwrite a file if it already exists on your computer. Other choices include only overwriting the file if the existing file is older or always overwriting the file.

Do not overwrite existing files

Upon restoration, files that already exist on your computer will not be overwritten by files from the backup

Overwrite existing files if they are older

Upon restoration, if a file is found to exist on your computer already, it will only be overwritten if the file on your computer is older than the one found in the backup.

Overwrite existing files

Upon restoration, if a file is found to already exist on your computer, it will always be overwritten.

Restore File Placement

The default setting is to restore the file(s) to the original location they were backed up from.

Restore file to its original location

Upon restoration, all files will be restored to their original location.

Restore file(s) to an alternate location

Upon restoration, all files will be restored to an alternate location. This location can be specified by typing the path to the restoration directory in the text box or by selecting a directory by clicking on the "Browse" button that will appear to the left of the text box when the radio button is selected.

Database Restores

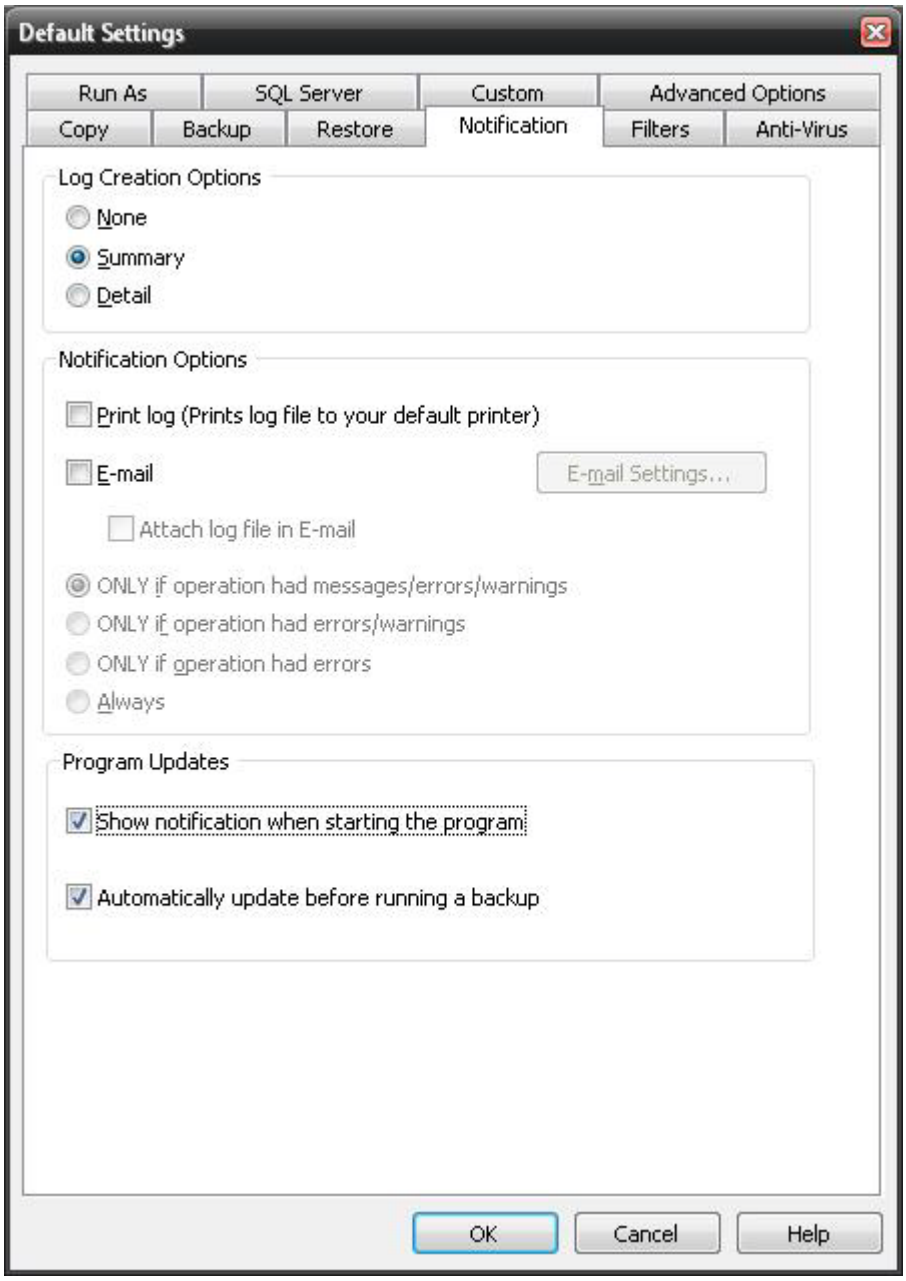
Restore the final incremental, or this is a full restore

When restoring the NovaBACKUP database always perform a full restore

Restore file to its original location

When restoring the NovaBACKUP database, always assume an incremental restore

Notification Tab



Log Creation Options

None

This will disable all logging for backup and restore.

Summary

This choice will result in a brief log file for the backup or restore. This includes file totals and times.

Detail

This choice allows NovaBACKUP to provide a detailed backup or restore log for the operation. It will include an information of each file that is backed up or restored during the process.

Notification Options

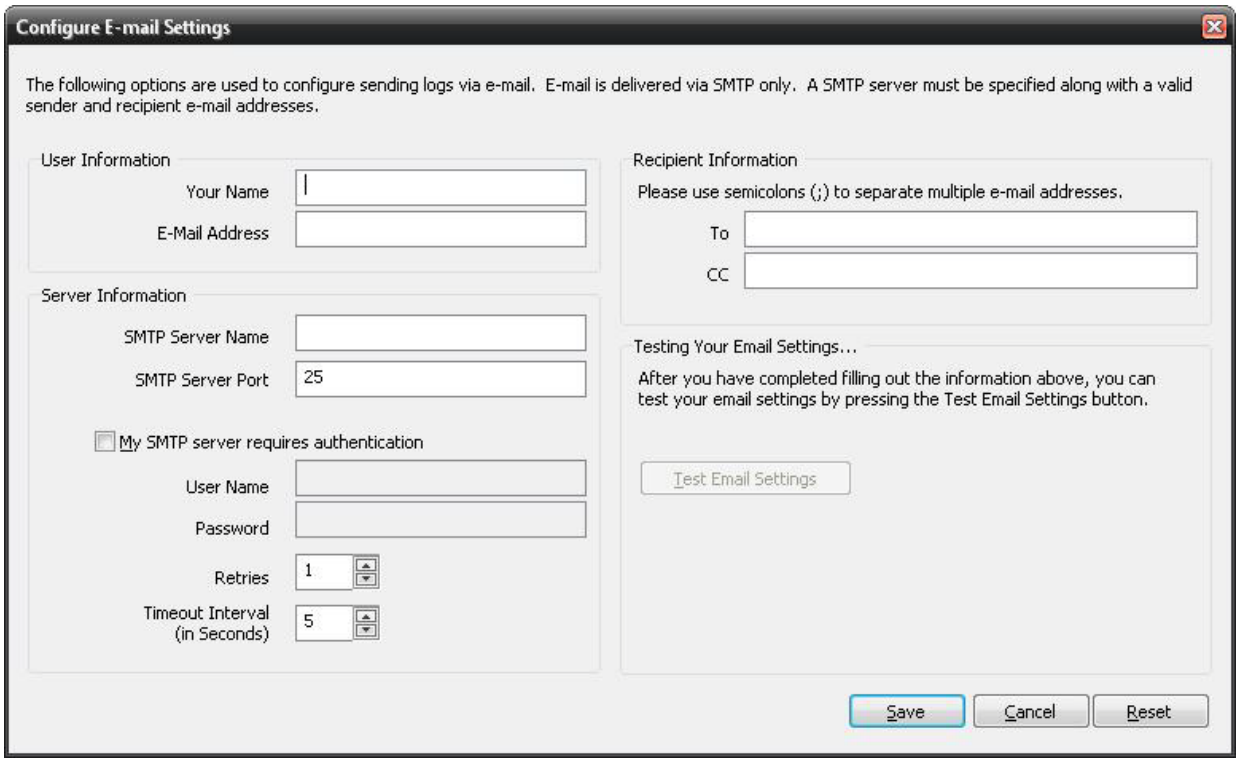
E-mail

Use this option to receive job notification in E-mail.

You have the option to allow the logs to be e-mailed to the specified email address. To utilize these settings you must first configure the e-mail options by clicking on the "E-Mail Settings" button.

E-mail Settings

Here, you will enter in the email settings required to communicate with your SMTP email server. The SMTP server information can be acquired from your System Administrator if you do not know it. You will also need to input two valid e-mail addresses for both the sender and the recipient. (These can be the same e-mail address.) If your SMTP server requires authentication, you may do so by tagging the checkbox for authentication and supplying your user name and password.


Configure E-mail Settings
The following options are used to configure sending logs via e-mail. E-mail is delivered via SMTP only. A SMTP server must be specified along with a valid sender and recipient e-mail addresses.
User Information
Your Name
E-Mail Address
Server Information
SMTP Server Name
SMTP Server Port
25
My SMTP server requires authentication
User Name
Password
Retries
1
Timeout Interval (in Seconds)
5
Recipient Information
Please use semicolons (;) to separate multiple e-mail addresses.
To
CC
Testing Your Email Settings...
After you have completed filling out the information above, you can test your email settings by pressing the Test Email Settings button.
Test Email Settings
Save
Cancel
Reset

Be sure to test your settings by clicking the "Test Email settings" button

Print Log

Here, you have the option to print the log automatically to your default printer.

Notification Conditions

- ONLY if operation had messages/errors/warnings
- ONLY if operation had errors/warnings
- ONLY if operation had errors
- Always

Program Updates

When a program update is available, display the option to install it when the program starts.

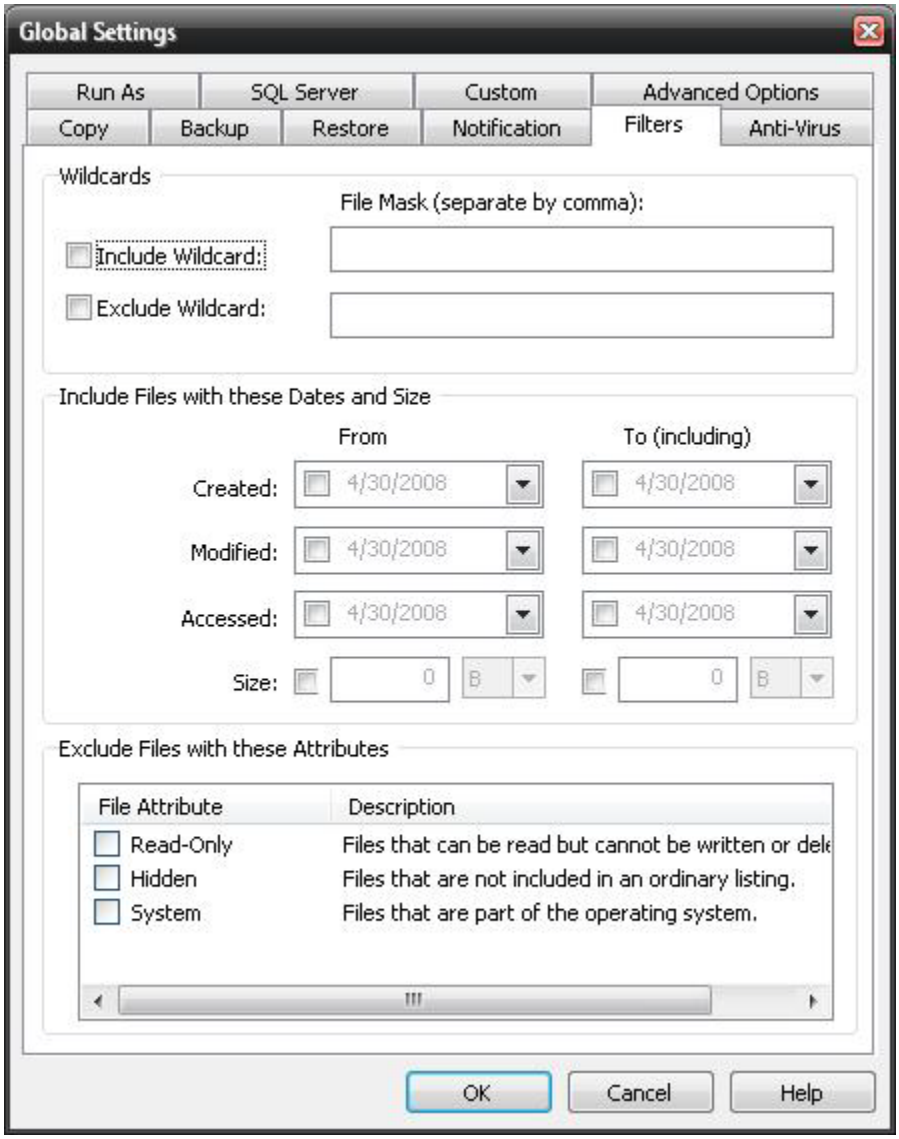
Show notification when starting the program

When a program update is available, display the option to install it when the program starts.

Automatically update before running a backup

When a program update is available, install it before starting the next backup.

Filters Tab



Wildcards

Include Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Exclude Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

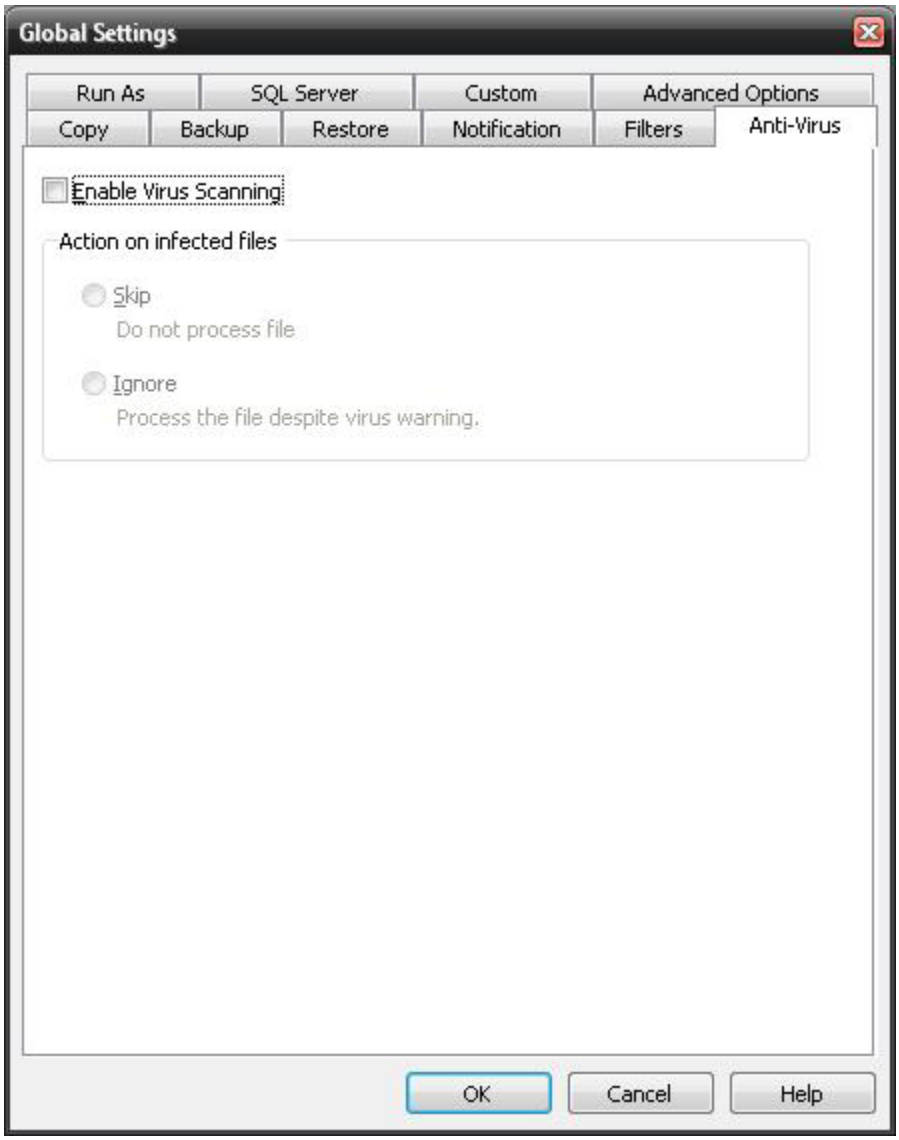
Include Files with these Dates and Size

Under this section, you can create an include filter by selecting dates that files were last created, modified, or accessed or by there file size that you wish to ensure are included in your backup. This is helpful if you want to reduce the time or file size of a backup. You may want to exclude older files that are no longer accessed or larger files you have already backed up..

Exclude Files with these Attributes

Under this section, you can create an exclude filter based on the file attributes: "Read Only", "Hidden" and "System". For example, if you would to exclude System or Hidden files, check the appropate box next to the attribute.

Anti-Virus Tab



Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system.

Note: To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to be backed up. This is the default selection.

Ignore-This option allows the files that have virus warnings to be backed up.

What are viruses? *Viruses are programs that run on your computer, without your consent or knowledge, with the sole intent of carrying out malicious behavior. At a minimum, they're annoying. In the worst cases, they destroy all your data and make your computer unusable.*

Run As Tab

When running a job, login using this account

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

Run the job using the specified credentials.

Domain Name: The domain name you are logging into.

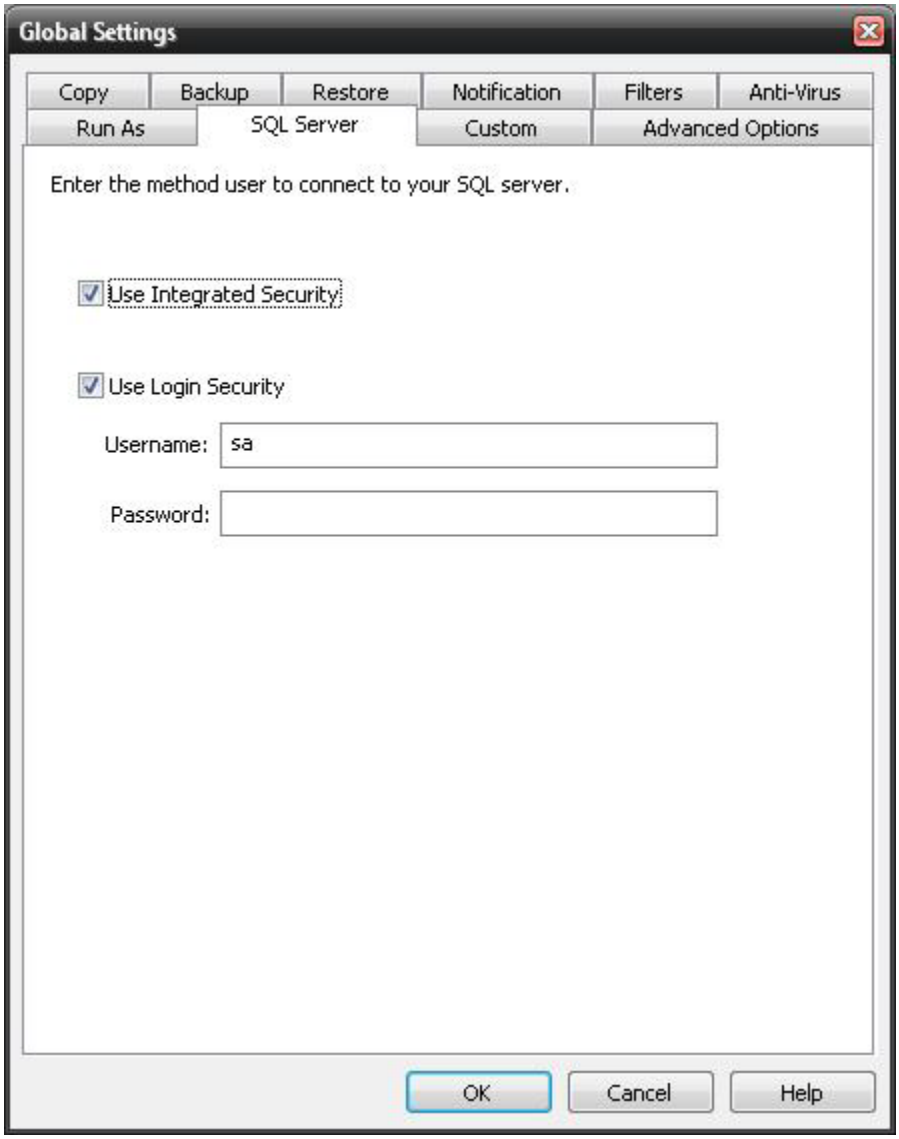
Run as User Name: The user name you want the job to run as.

Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: If you have entered credentials you must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

SQL Server Tab



SQL Server Backup Method

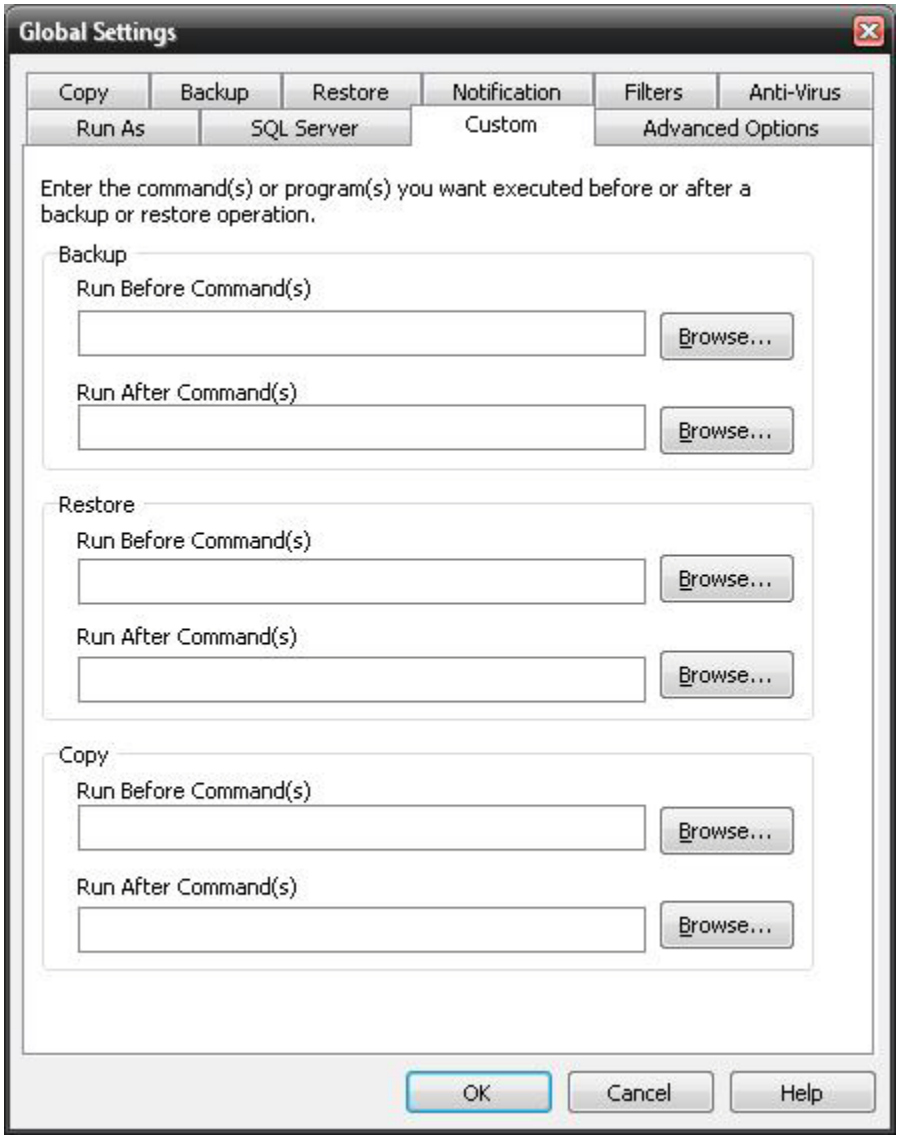
Use Integrated Security: Use the account configured for the specific job when backing up SQL Server

Use Login Security: Use this account when backup up SQL Server

> **Username:** Enter the username for the specific SQL Server account that has permission to backup the databases

Password: Enter the password for the specific SQL Server account that has permission to backup the databases.

Custom Tab



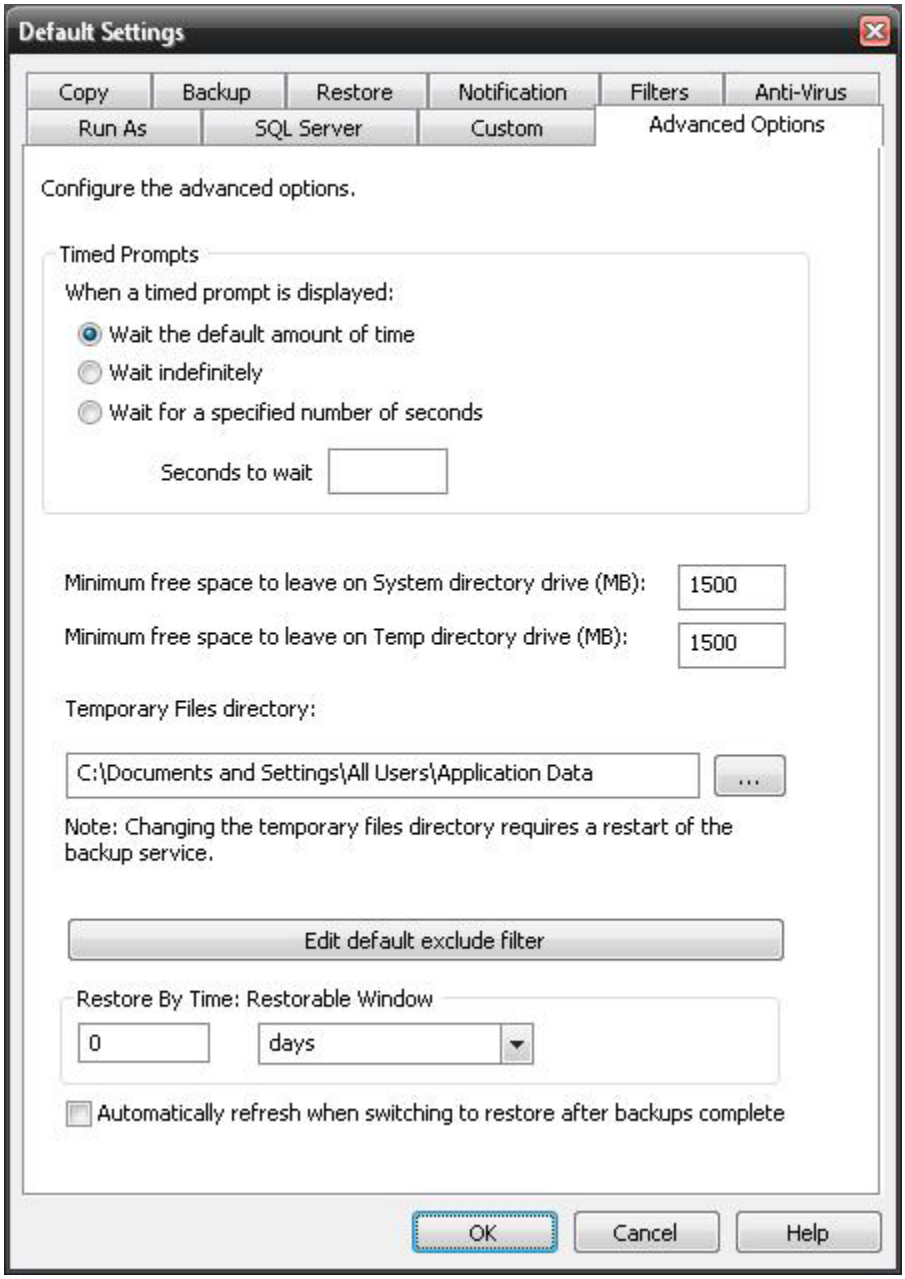
This feature enables a command to run before or after a backup, restore or copy job

To select which program or command you would like to run before or after those operations, simply browse to the program or command using the "Browse" button.

The benefits of this feature are numerous. For instance, one would be able to stop Antivirus scanning by issuing a command to their Anti-virus program prior to NovaBACKUP beginning the backup. Alternatively, a command can be issued at the end of the backup to begin an anti-virus scan.

Also one could issue a command to close a database at the beginning of a backup and reopen it at the end of a backup

Advanced Options Tab



Timed Prompts

When prompts or dialogs are displayed, select the action you want performed.

This option is useful in allowing fully unattended operation or permitting the administrator to respond to specific issues or requests.

"Minimum Free Space" settings

This values represent the minimum amount of free disk space that must be available on the System (OS) and Temp drive (if different) in order for jobs to run.

"Temporary files directory"

Directory used to stage working files used by NovaBACKUP. If your system is running low on space, you can move this directory to another drive.

"Edit default exclude filter"

Select this option to add or edit folders, files or file types that should be excluded from jobs regardless of selection.

"Restore By Time: Restorable Widow"

Use this option to restrict the time range in effect for the Restore Files By Time view. A setting of zero will have no effect. Otherwise the value set here will define the time in effect from the current time selected moving back in time. This setting has no effect in the Restore Files By Device view.

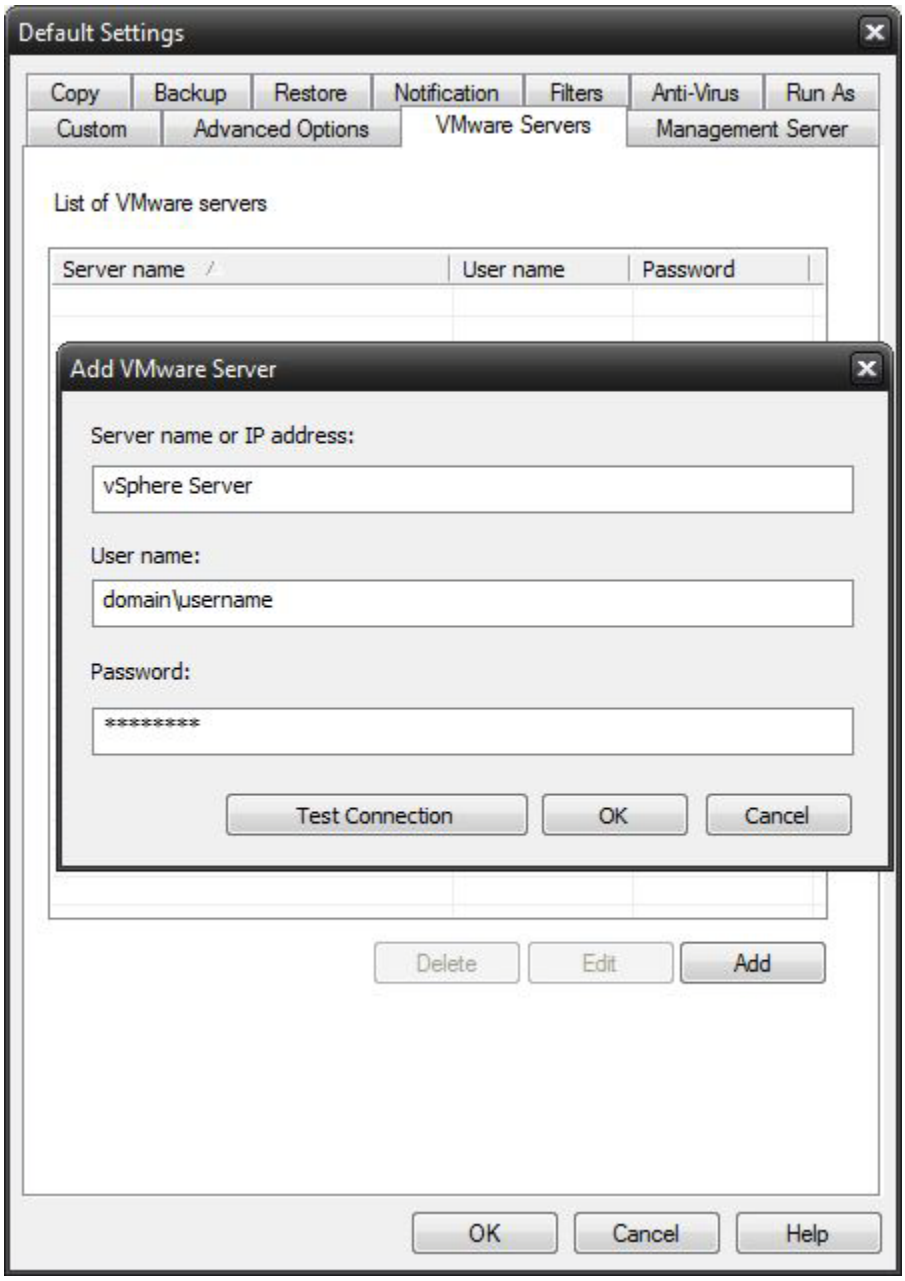
"Automatically refresh when switching to restore after backups complete"

Use this option to make the Restore By Time view automatically build a new filelist when switching to the restore view after a backup has completed.

Management Server Tab

For those installations accessible from a central management console, this screen may be used to specify the server name and port to access the management server.

VMware Servers Tab

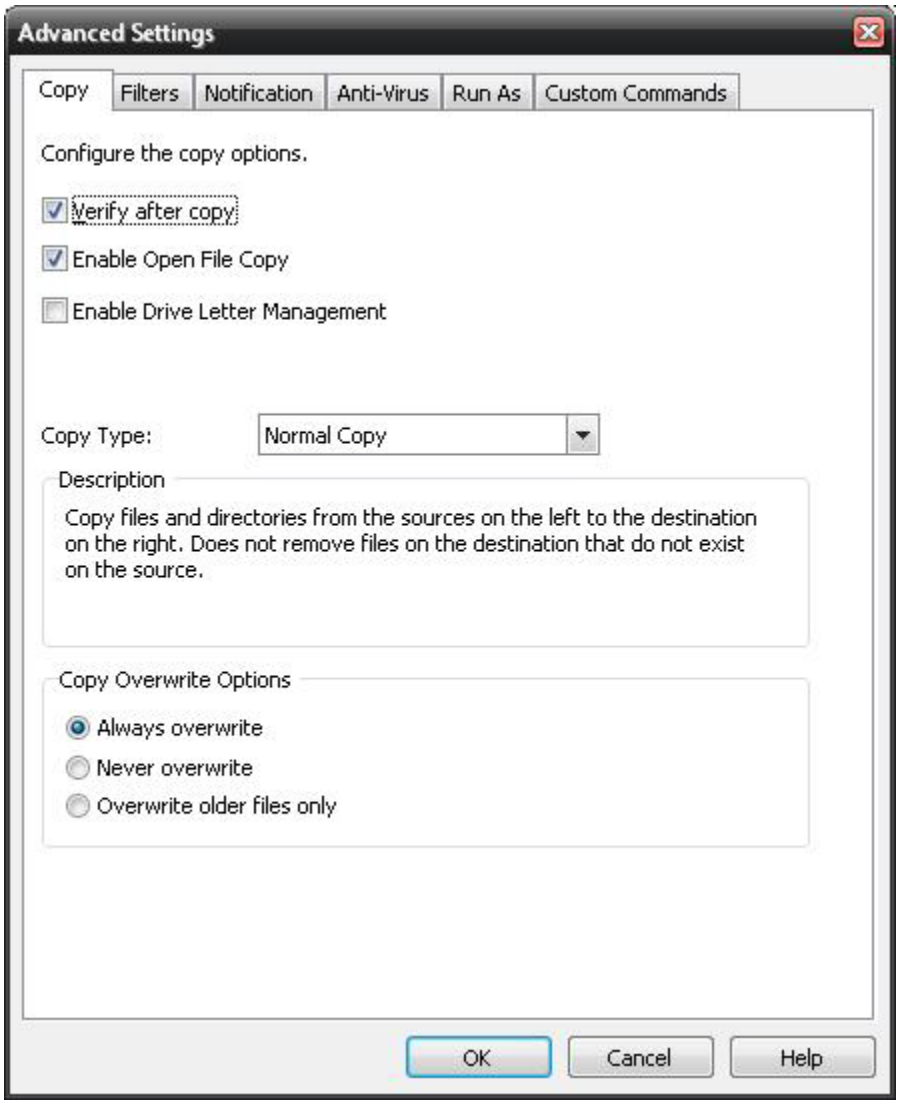


For those licensed to use the VMware Plugin, this tab is used to add a new connection to an ESX(i) or vSphere server.

Job Settings

Copy Job Settings

Copy Job Options



Verify after copy

The files that are copied will be verified to make sure that they were written correctly. Selecting this option will increase copy time. This setting is selected by default.

It is highly recommended to select the option to verify your data after a copy job. This helps to ensure that the copied data matches the data presently on your system. If you do not select this option, and there is

an error in some of your copied data, you will not be aware of the errors until you go to access the copied data.

Enable Open File Copy
Select this option to have NovaBACKUP automatically copy open files on the local system using Volume Snapshot Service (VSS).
Note: This option NOT available when running on Windows 2000.

Enable Drive Letter Management
Select this option to have NovaBACKUP automatically select the correct removable disk device (USB) even when it's drive letter changes.

Copy Type

"Copy"
Copy files and directories from the source(s) on the left to the destination or the right. Does not remove files on the destination that DO NOT exist on the source

"Mirror"
Mirror files and directories from the source(s) on the left to the destination or the right. REMOVES files on the destination that DO NOT exist on the source

"Bidirectional Copy"
Copy files and directories between the left and the right paths. Results in an identical set of files and folders on both sides: Files on one side, but not the other are copied

Note: *Files that have been deleted from one path will NOT be deleted from the other*

Copy Overwrite Options

Always Overwrite

Source file will always overwrite an existing file of the same name on the destination.

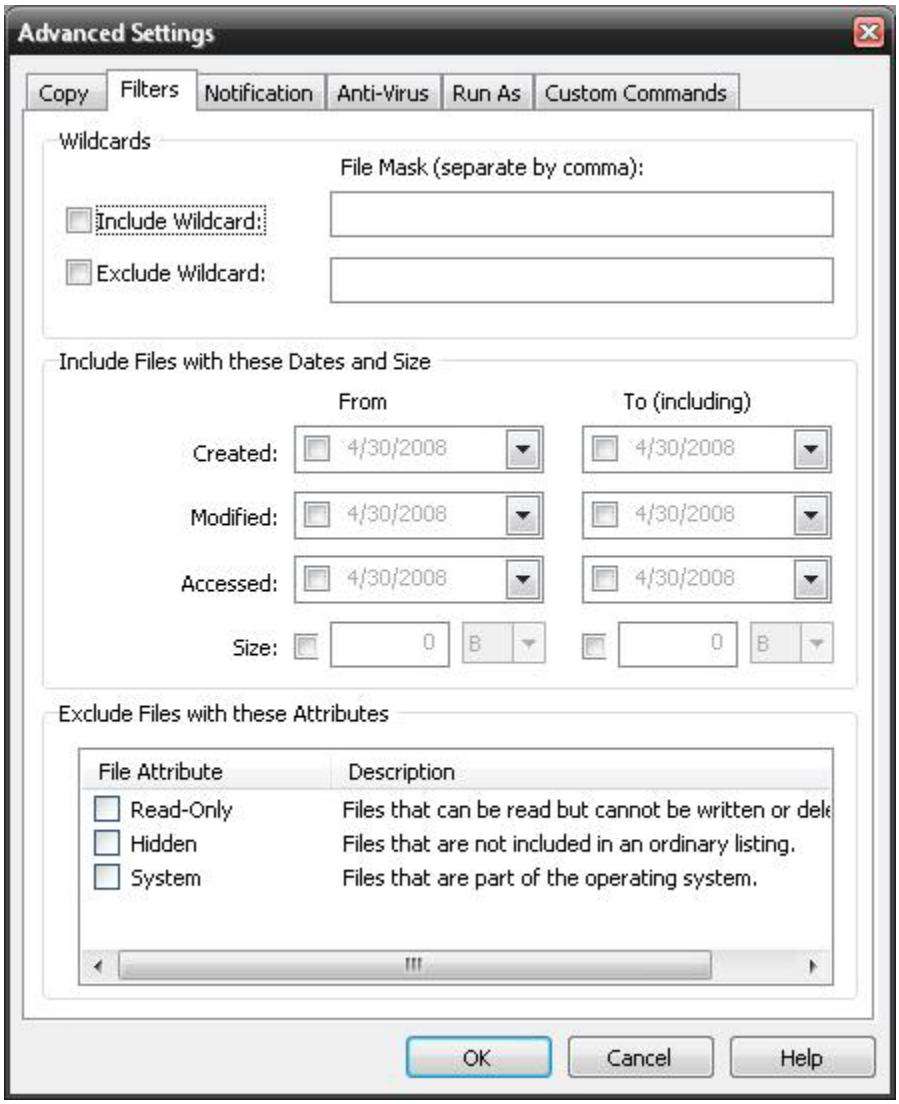
Never Overwrite

Source file will never overwrite an existing file of the same name on the destination.

Overwrite older files only

Source file will overwrite an existing file of the same name on the destination if the destination file is older.

Copy Job Filters



Wildcards

Include Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Exclude Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Include Files with these Dates and Size

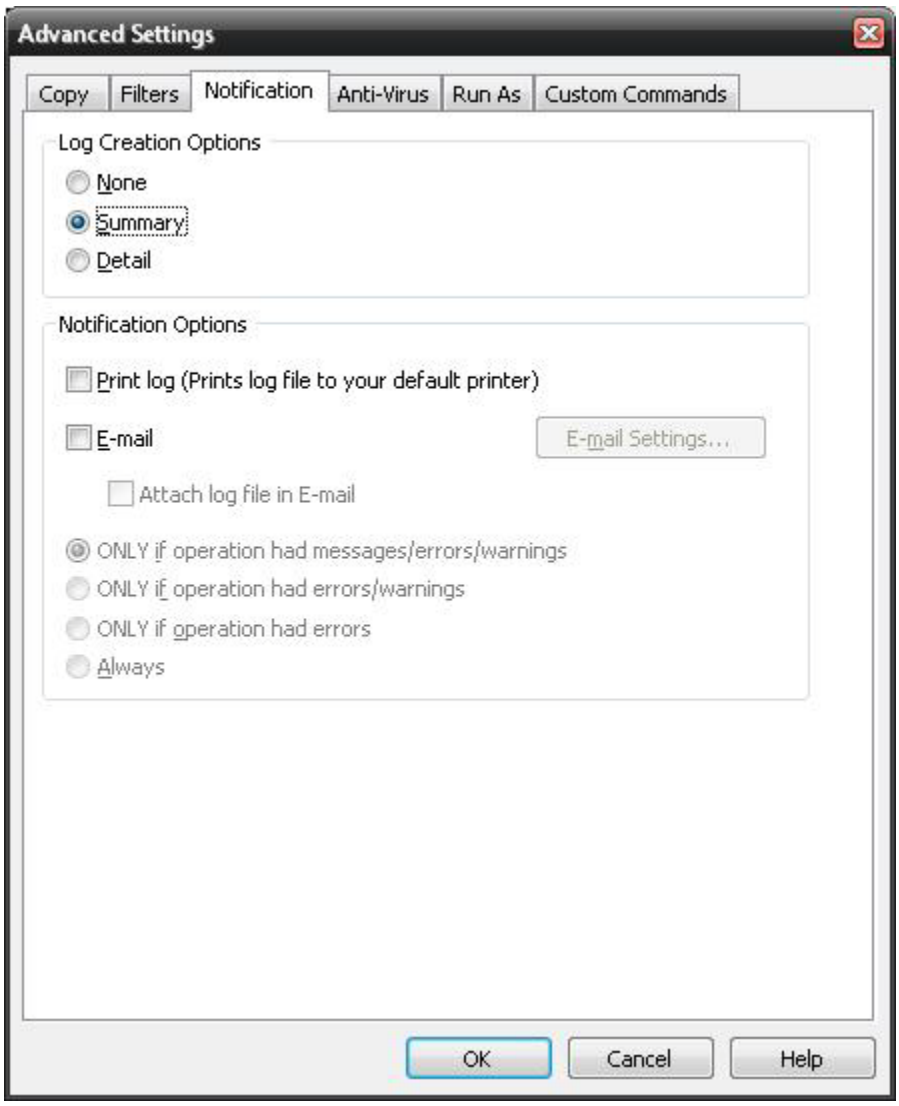
Under this section, you can create an include filter by selecting dates that files were last created, modified, or accessed or by there file size that you wish to ensure are included in your backup. This is helpful if you want to reduce the time or file size of a backup. You may want to exclude older files that are no longer accessed or larger files you have already backed up..

Exclude Files with these Attributes

Under this section, you can create an exclude filter based on the file attributes: "Read Only", "Hidden"

and "System". For example, if you would to exclude System or Hidden files, check the appropate box next to the attribute.

Copy Job Notification



Log Creation Options

None

This will disable all logging for backup and restore.

Summary

This choice will result in a brief log file for the backup or restore. This includes file totals and times.

Detail

This choice allows NovaBACKUP to provide a detailed backup or restore log for the operation. It will include an information of each file that is backed up or restored during the process.

Notification Options

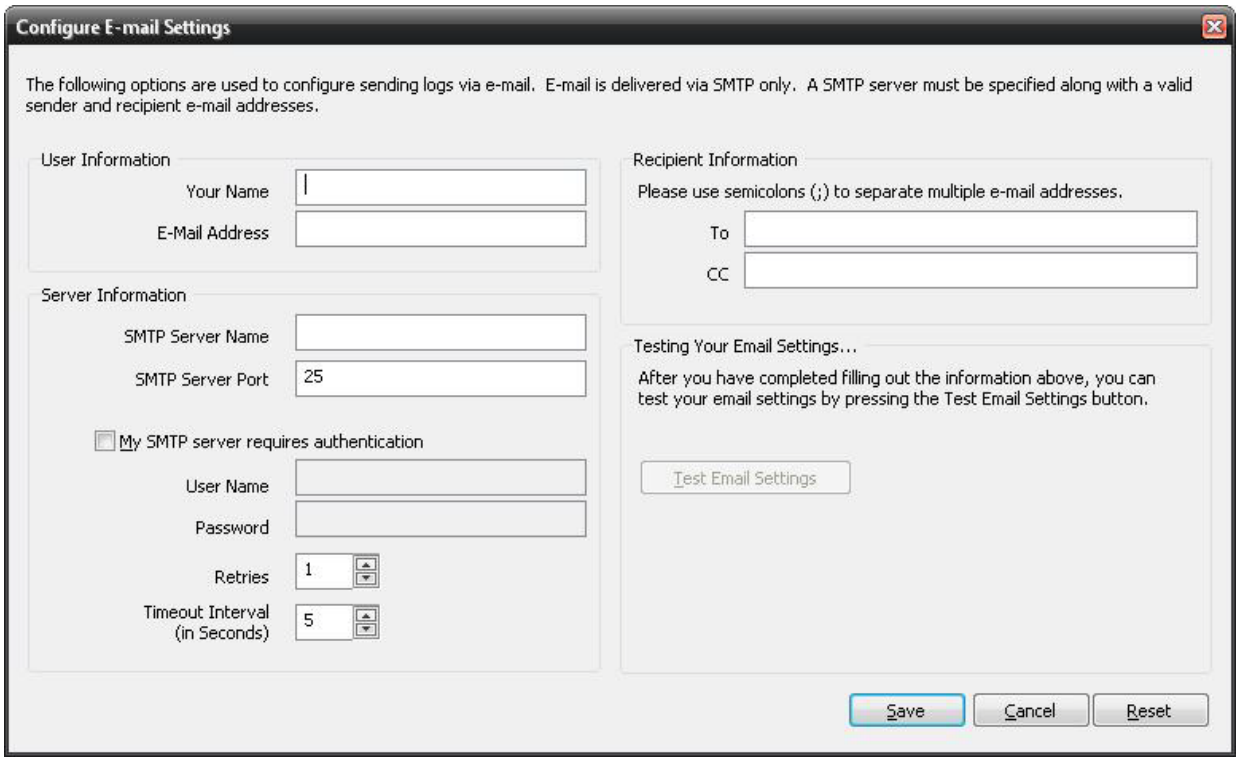
E-mail

Use this option to receive job notification in E-mail.

You have the option to allow the logs to be e-mailed to the specified email address. To utilize these settings you must first configure the e-mail options by clicking on the "E-Mail Settings" button.

E-mail Settings

Here, you will enter in the email settings required to communicate with your SMTP email server. The SMTP server information can be acquired from your System Administrator if you do not know it. You will also need to input two valid e-mail addresses for both the sender and the recipient. (These can be the same e-mail address.) If your SMTP server requires authentication, you may do so by tagging the checkbox for authentication and supplying your user name and password.


Configure E-mail Settings
The following options are used to configure sending logs via e-mail. E-mail is delivered via SMTP only. A SMTP server must be specified along with a valid sender and recipient e-mail addresses.
User Information
Your Name
E-Mail Address
Server Information
SMTP Server Name
SMTP Server Port
25
My SMTP server requires authentication
User Name
Password
Retries
1
Timeout Interval (in Seconds)
5
Recipient Information
Please use semicolons (;) to separate multiple e-mail addresses.
To
CC
Testing Your Email Settings...
After you have completed filling out the information above, you can test your email settings by pressing the Test Email Settings button.
Test Email Settings
Save
Cancel
Reset

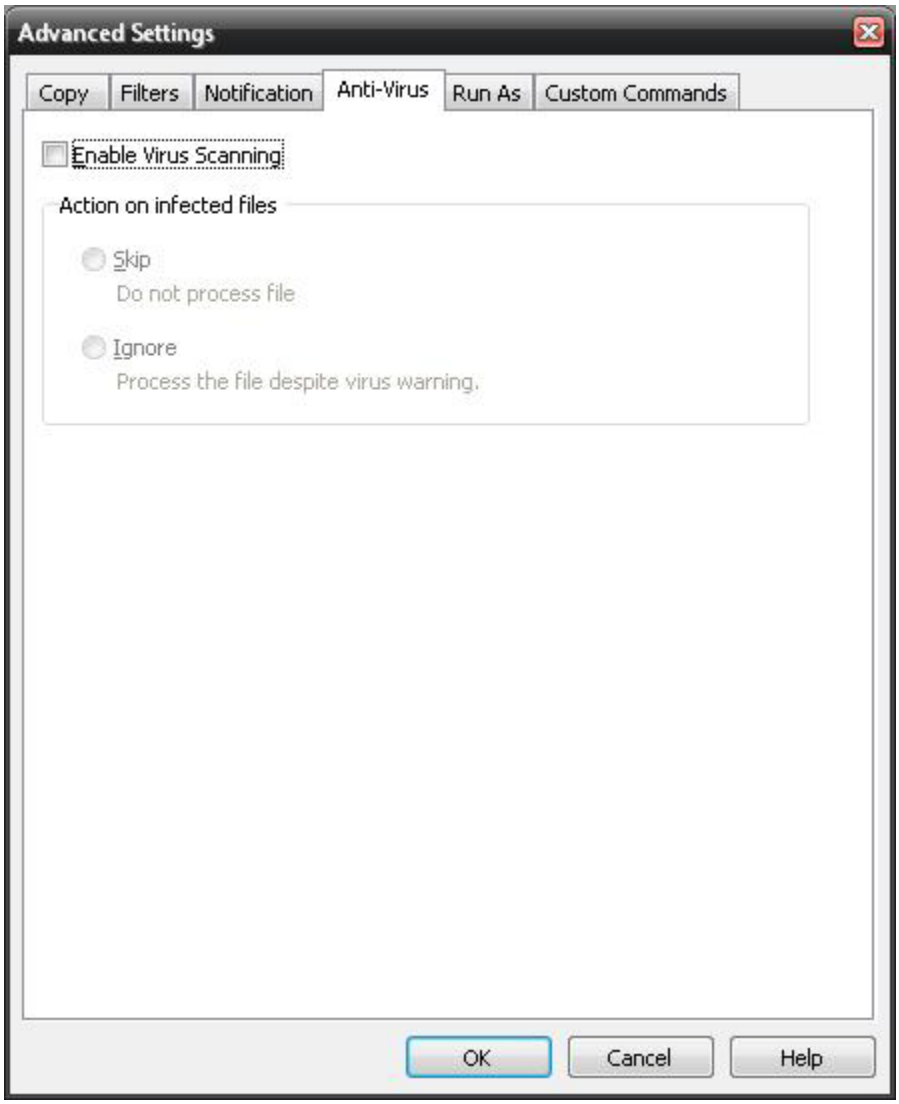
Be sure to test your settings by clicking the "Test Email settings" button

Print Log

Here, you have the option to print the log automatically to your default printer. **Notification Conditions**

- ONLY if operation had messages/errors/warnings
- ONLY if operation had errors/warnings
- ONLY if operation had errors
- Always

Copy Job Anti-Virus



Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system.

Note: To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to be backed up. This is the default selection.

Ignore-This option allows the files that have virus warnings to be backed up.

What are viruses? *Viruses are programs that run on your computer, without your consent or knowledge, with the sole intent of carrying out malicious behavior. At a minimum, they're annoying. In the worst cases, they destroy all your data and make your computer unusable.*

Copy Job Run As

When running a job, login using this account

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

Run the job using the specified credentials.

Domain Name: The domain name you are logging into.

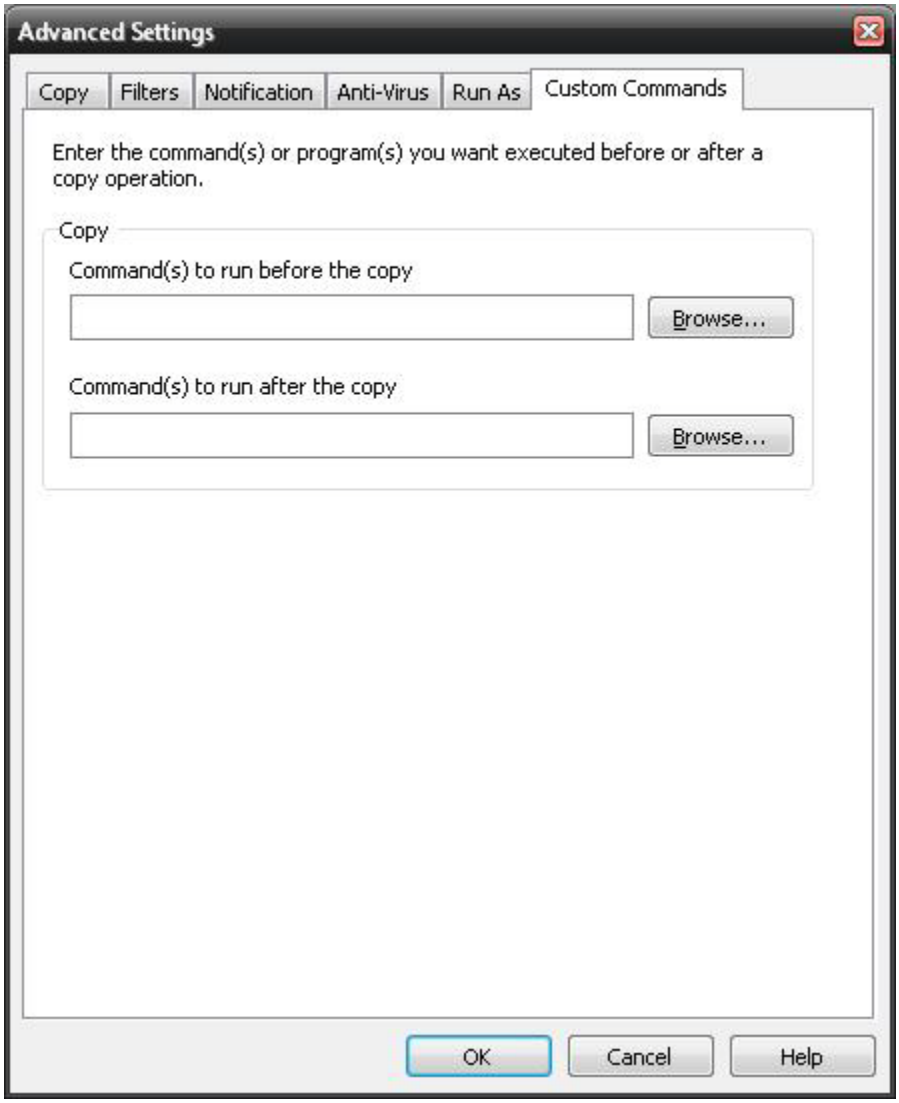
Run as User Name: The user name you want the job to run as.

Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: If you have entered credentials you must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

Copy Job Custom Commands



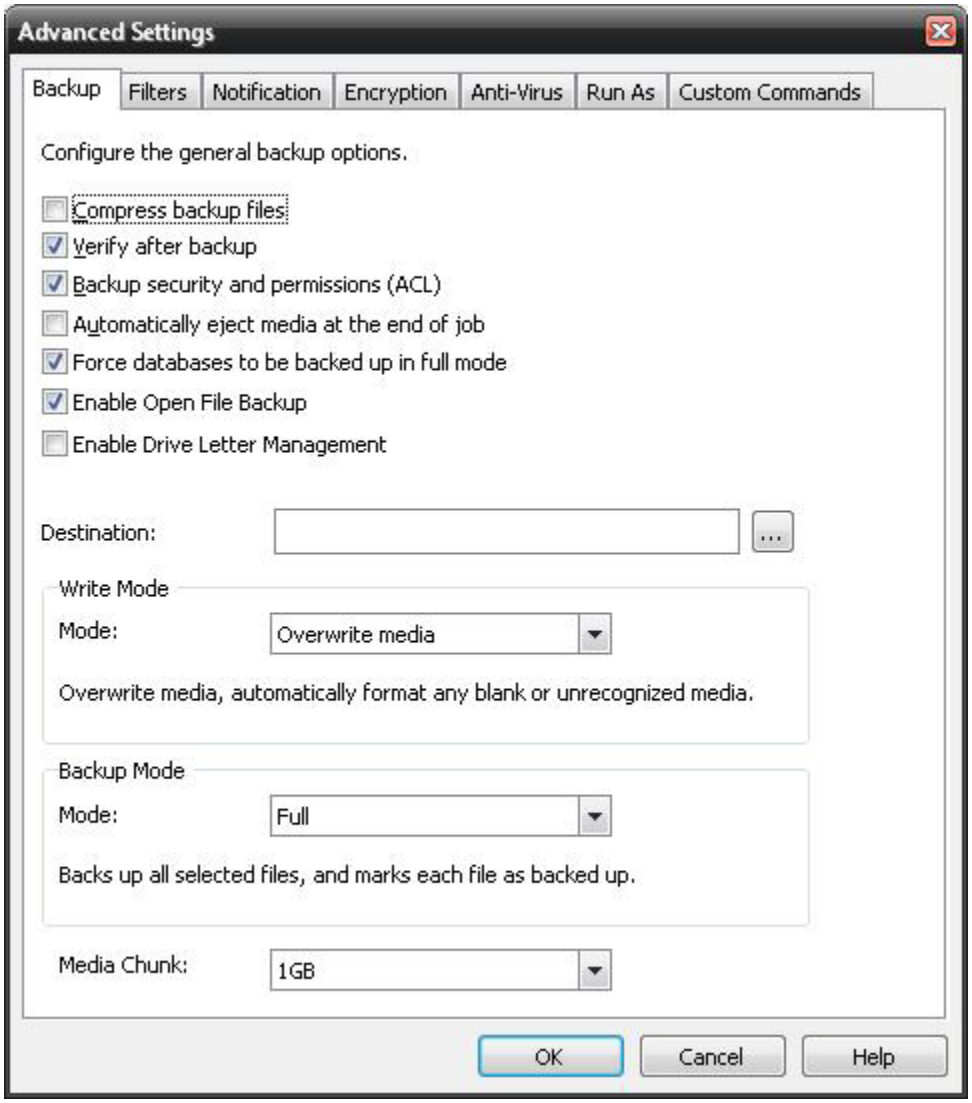
This feature enables a command to run before or after a copy job

To select which program or command you would like to run before or after the copy operation, simply browse to the program or command using the "Browse" button.

The benefits of this feature are numerous. For instance, one would be able to stop Antivirus scanning by issuing a command to their Anti-virus program prior to NovaBACKUP beginning the copy job. Alternatively, a command can be issued at the end of the job to begin an anti-virus scan. Also one could issue a command to close a database at the beginning of a job and reopen it at the end of a job.

Backup Job Settings

Backup Job Options



Compress backup files

The backup files are compressed to save space. Backup speed is increased when this option is selected. This setting is selected by default.

Verify after backup

The files that are backed up will be verified to make sure that they were written correctly. Selecting this option will increase backup time. This setting is selected by default.

It is highly recommended to select the option to verify your data after a backup. This helps to ensure that the backed up data matches the data presently on your system. If you do not select this option, and there is an error in some of your backed up data, there will be errors upon restoring that data if you should need to.

Backup ACL File Permissions

Select this option to backup Access Control Lists (ACL's) in addition to file data. ACL's contain file and system permissions. This option should be enabled to maintain system security.

Automatically Eject Media. . .

Select this option to have NovaBACKUP automatically eject the media after a backup has completed (device must support media eject)

Force database to be backed up in full mode

Regardless of the backup type, always backup the NovaBACKUP database in full mode. This assures that it can be recovered quickly from a single backup rather than from multiple backups

Enable Open File Backup

Select this option to have NovaBACKUP automatically backup open files on the local system using Volume Snapshot Service (VSS).

Note: This option is NOT available when running on Windows 2000.

Enable Drive Letter Management

Select this option to have NovaBACKUP automatically select the correct removable disk device (USB) even when it's drive letter changes.

Destination

Select the default destination device a backup for all new backup jobs

Write Mode

Overwrite media:

Overwrite all recognized media. Automatically format blank or unrecognized media

Append to Media:

Append to recognized media. Automatically format blank or unrecognized media

Backup Mode

Full

Backs up all selected files, and marks each file as backed up. This is the default setting.

Incremental

Backs up (and marks as backed up) selected files that have either not been backed up previously or have changed.

Differential

Backs up selected files that have either not been backed up previously or have changed. These backed up files are not marked as backed up, however.

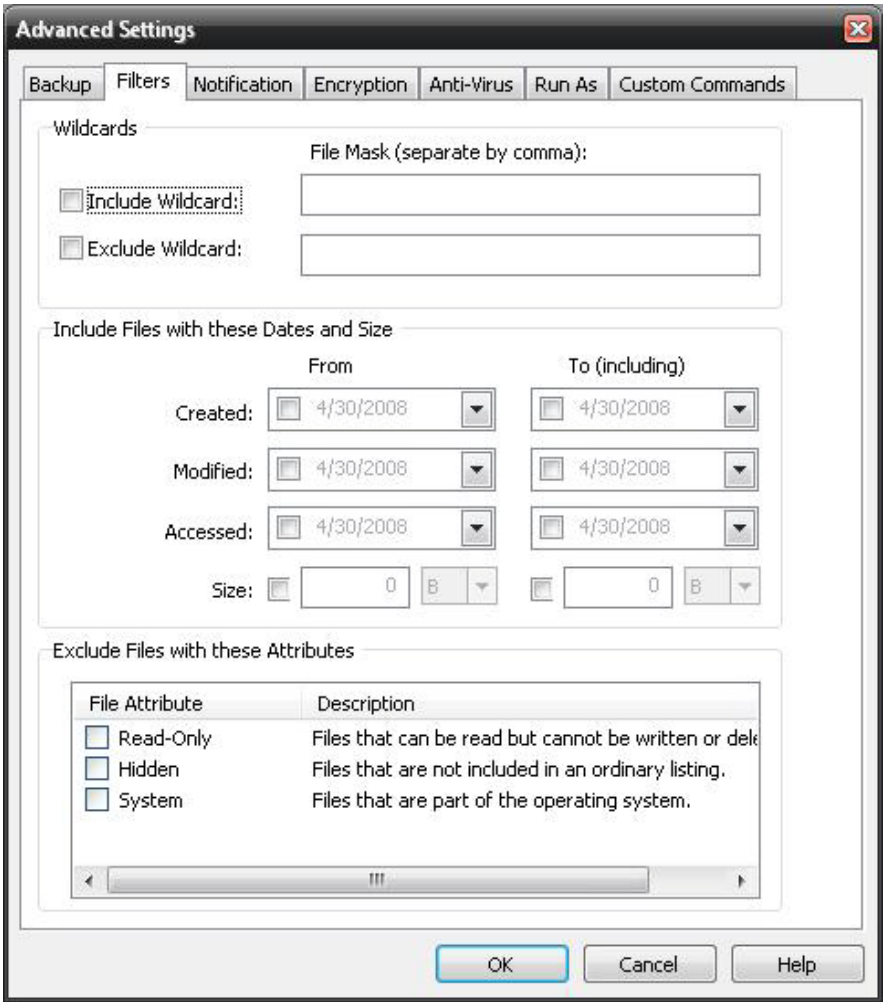
Snapshot

Backs up all selected files and does not mark any files as backed up.

Media Chunk

A chunk is a unit of backup data that is written to media. This value determines a what point the backup archive will be split into multiple files of the size selected. Note: This option does not apply to "tape" media.

Backup Job Filters



Wildcards

Include Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Exclude Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

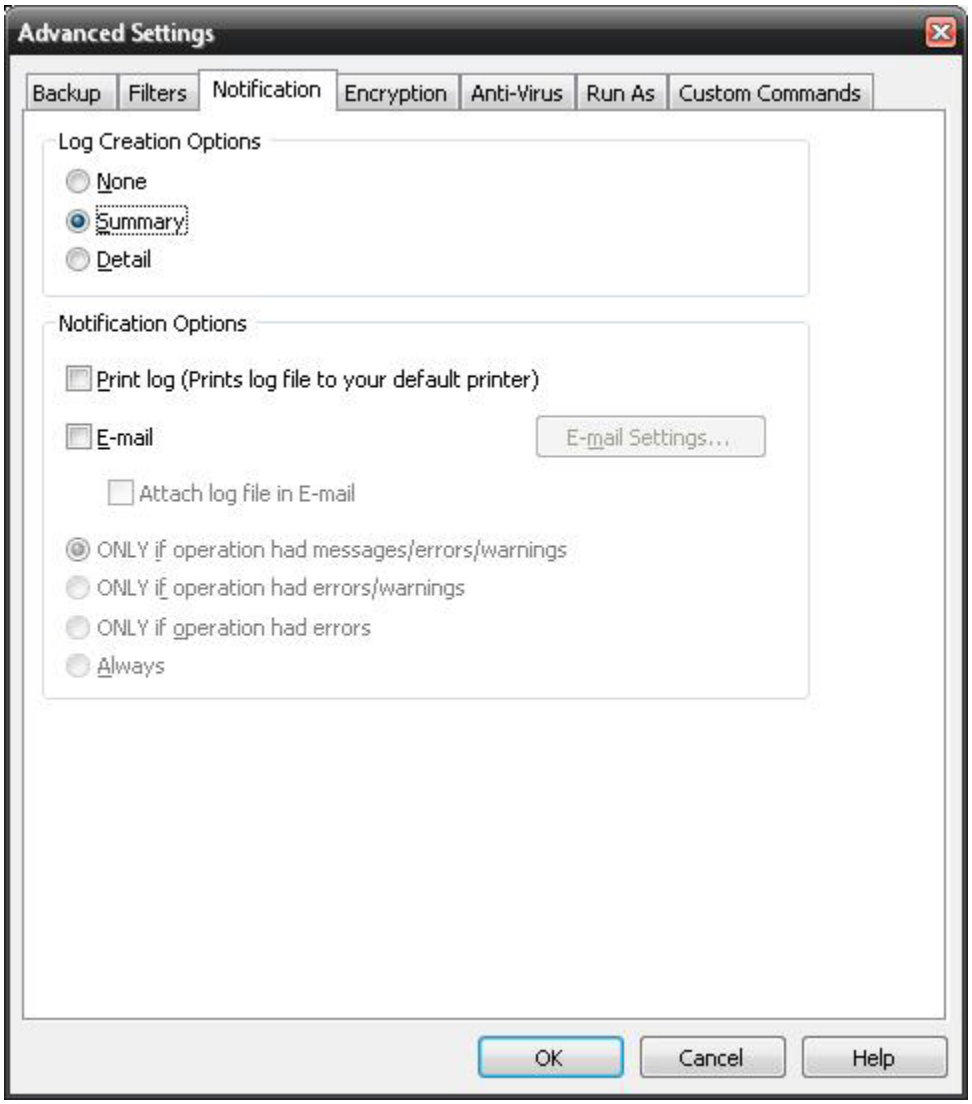
Include Files with these Dates and Size

Under this section, you can create an include filter by selecting dates that files were last created, modified, or accessed or by there file size that you wish to ensure are included in your backup. This is helpful if you want to reduce the time or file size of a backup. You may want to exclude older files that are no longer accessed or larger files you have already backed up..

Exclude Files with these Attributes

Under this section, you can create an exclude filter based on the file attributes: "Read Only", "Hidden" and "System". For example, if you would to exclude System or Hidden files, check the appropate box next to the attribute.

Backup Job Notifications



Log Creation Options

None

This will disable all logging for backup and restore.

Summary

This choice will result in a brief log file for the backup or restore. This includes file totals and times.

Detail

This choice allows NovaBACKUP to provide a detailed backup or restore log for the operation. It will include a information of each file that is backed up or restored during the process.

Notification Options

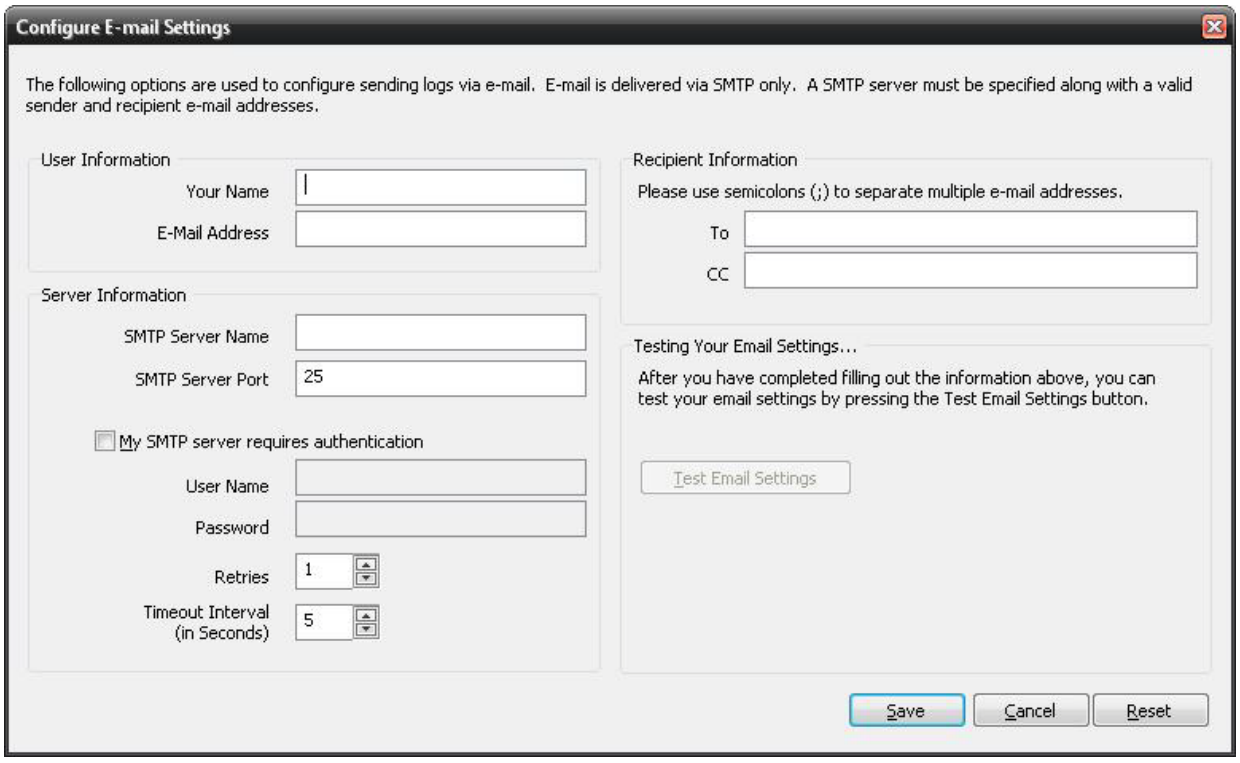
E-mail

Use this option to receive job notification in E-mail.

You have the option to allow the logs to be e-mailed to the specified email address. To utilize these settings you must first configure the e-mail options by clicking on the "E-Mail Settings" button.

E-mail Settings

Here, you will enter in the email settings required to communicate with your SMTP email server. The SMTP server information can be acquired from your System Administrator if you do not know it. You will also need to input two valid e-mail addresses for both the sender and the recipient. (These can be the same e-mail address.) If your SMTP server requires authentication, you may do so by tagging the checkbox for authentication and supplying your user name and password.


Configure E-mail Settings
The following options are used to configure sending logs via e-mail. E-mail is delivered via SMTP only. A SMTP server must be specified along with a valid sender and recipient e-mail addresses.
User Information
Your Name
E-Mail Address
Server Information
SMTP Server Name
SMTP Server Port
25
My SMTP server requires authentication
User Name
Password
Retries
1
Timeout Interval (in Seconds)
5
Recipient Information
Please use semicolons (;) to separate multiple e-mail addresses.
To
CC
Testing Your Email Settings...
After you have completed filling out the information above, you can test your email settings by pressing the Test Email Settings button.
Test Email Settings
Save
Cancel
Reset

Be sure to test your settings by clicking the "Test Email settings" button

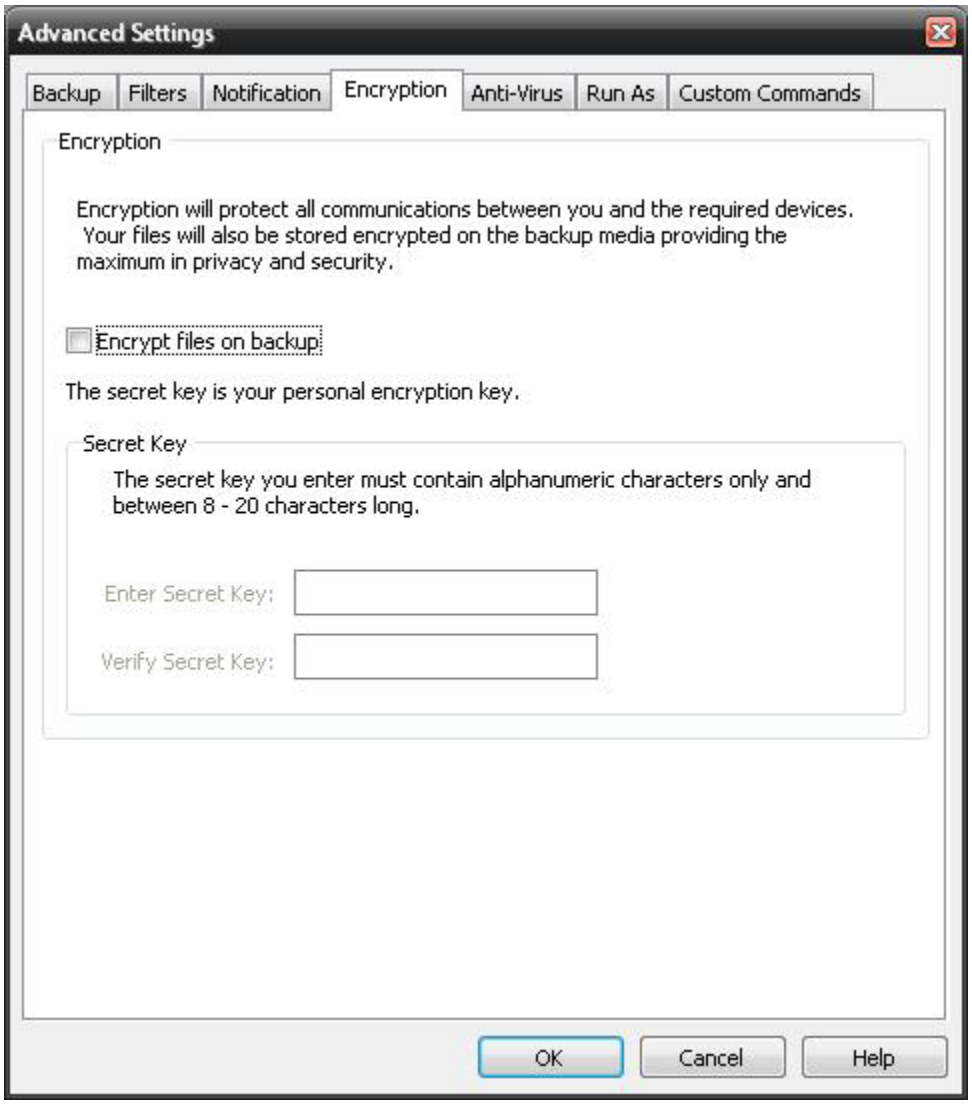
Print Log

Here, you have the option to print the log automatically to your default printer.

Notification Conditions

- ONLY if operation had messages/errors/warnings
- ONLY if operation had errors/warnings
- ONLY if operation had errors
- Always

Backup Job Encryption


Advanced Settings
Backup
Filters
Notification
Encryption
Anti-Virus
Run As
Custom Commands
Encryption
Encryption will protect all communications between you and the required devices. Your files will also be stored encrypted on the backup media providing the maximum in privacy and security.
Encrypt files on backup
The secret key is your personal encryption key.
Secret Key
The secret key you enter must contain alphanumeric characters only and between 8 - 20 characters long.
Enter Secret Key:
Verify Secret Key:
OK
Cancel
Help

Encryption

Encrypt Files on backup

Encryption protects files as they are backed up to the selected device. In addition, files are maintained encrypted on the destination media for added security.

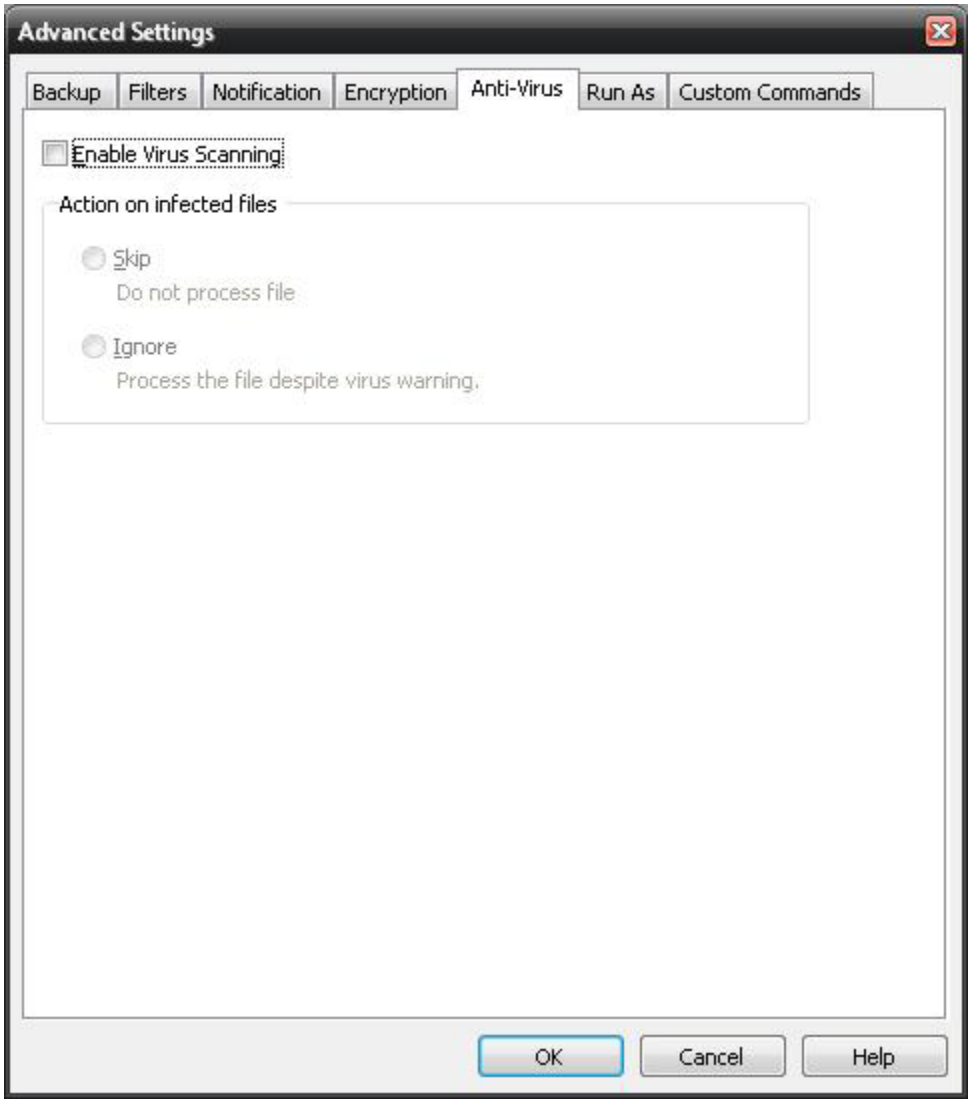
Secret Key

Encryption Key used for this particular backup job. Select a key containing from 8 to 20 characters

For added security, select a secret key that contains a combination of upper/lower case characters as well as numbers, punctuation and symbols.

Select a secret key that you will be able to remember. If you forgot your secret key, you will not be able to restore the data from the destination media.

Backup Job Anti-Virus



Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system.

Note: To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

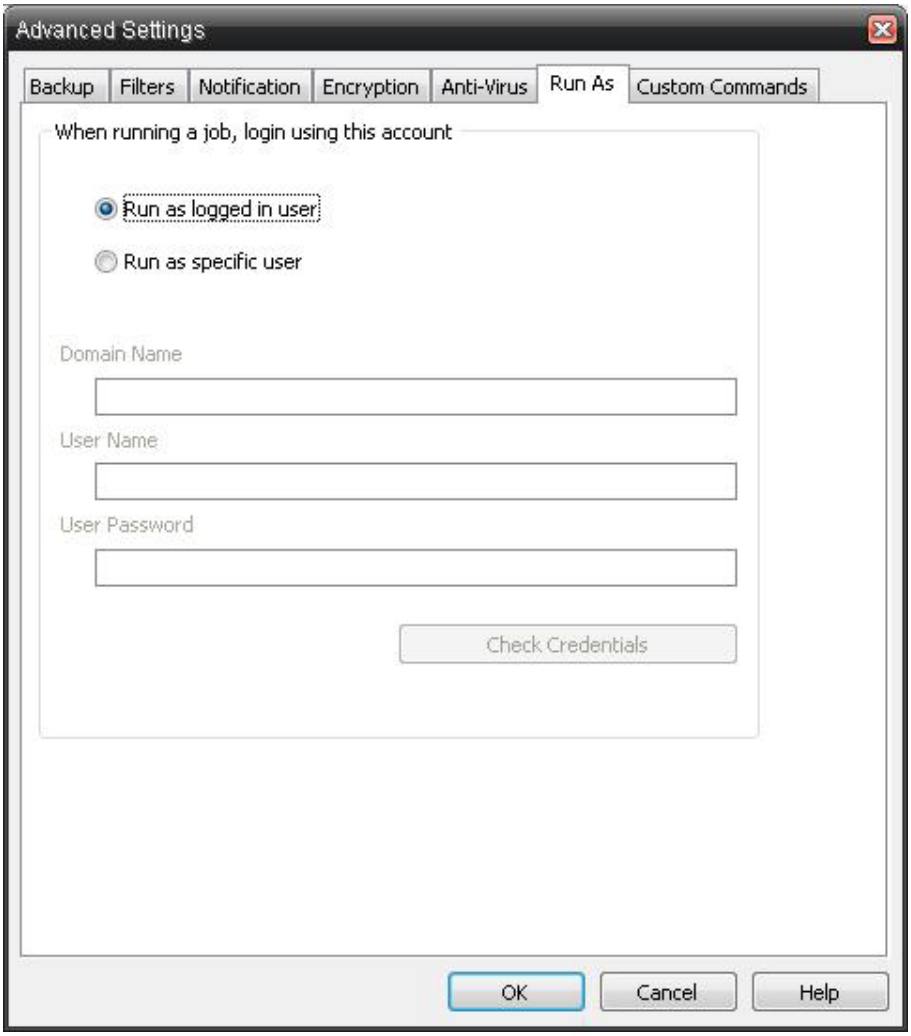
Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to be backed up. This is the default selection.

Ignore-This option allows the files that have virus warnings to be backed up.

What are viruses? *Viruses are programs that run on your computer, without your consent or knowledge, with the sole intent of carrying out malicious behavior. At a minimum, they're annoying. In the worst cases, they destroy all your data and make your computer unusable.*

Backup Job Run As



When running a job, login using this account

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

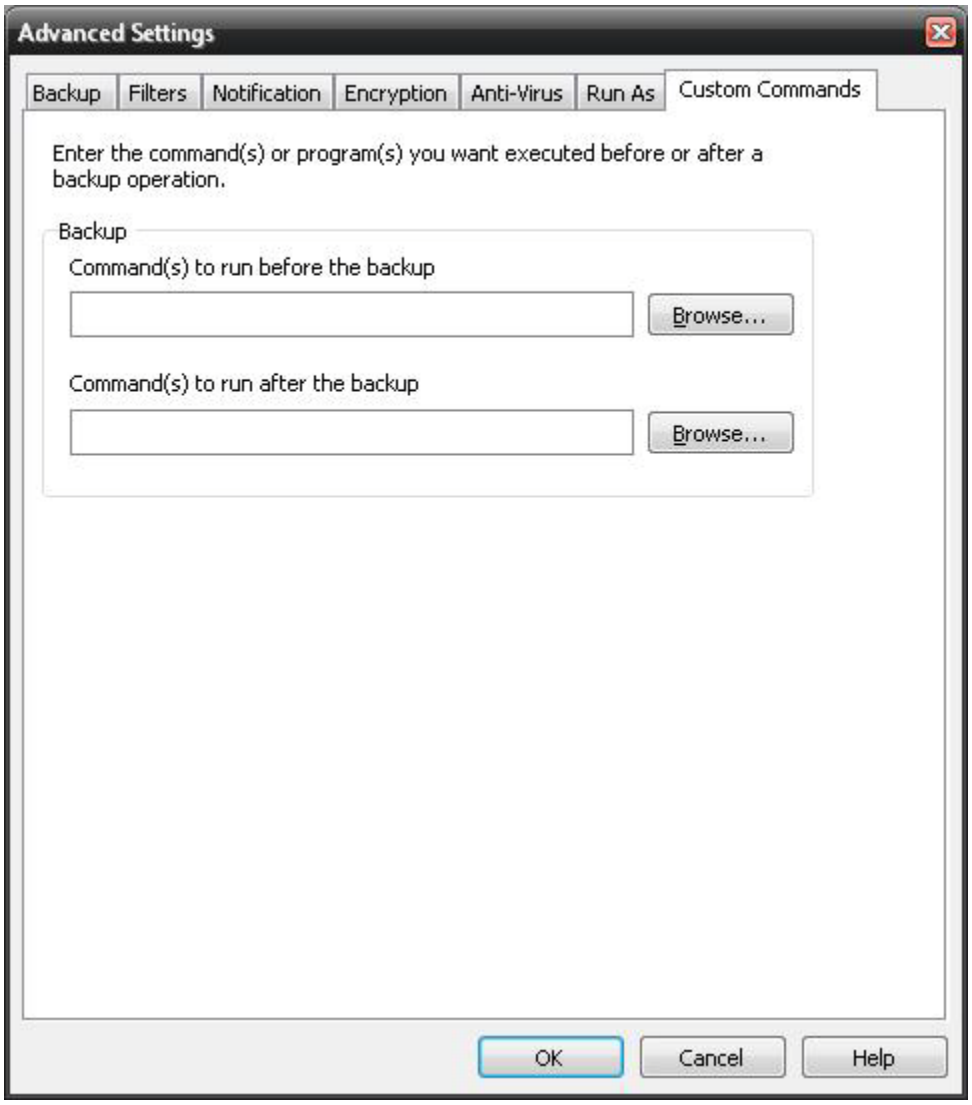
Run the job using the specified credentials.

Domain Name: The domain name you are logging into.
Run as User Name: The user name you want the job to run as.
Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: If you have entered credentials you must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

Backup Job Custom Commands



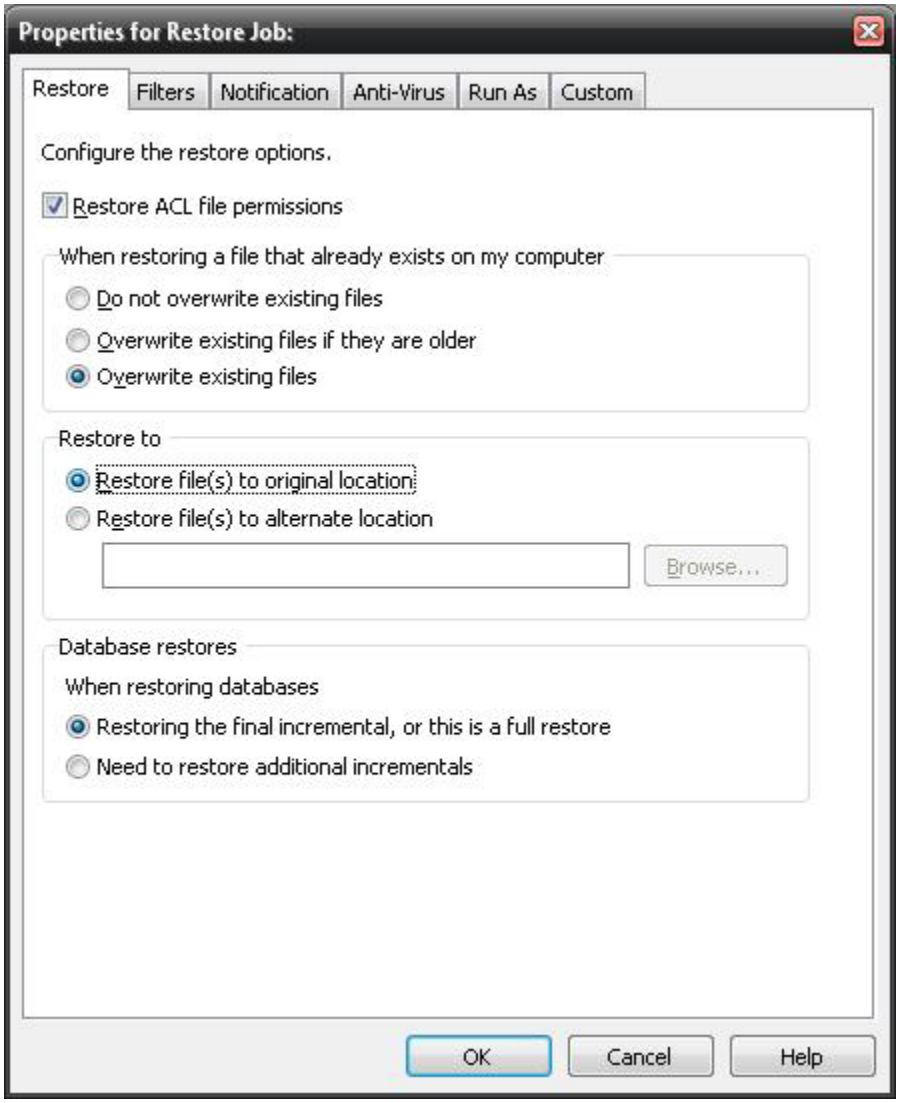
This feature enables a command to run before or after a backup job

To select which program or command you would like to run before or after the copy operation, simply browse to the program or command using the "Browse" button.

The benefits of this feature are numerous. For instance, one would be able to stop Antivirus scanning by issuing a command to their Anti-virus program prior to NovaBACKUP beginning the backup job. Alternatively, a command can be issued at the end of the job to begin an anti-virus scan. Also one could issue a command to close a database at the beginning of a job and reopen it at the end of a job.

Restore Job Settings

Restore Job Options



Restore ACL File Permissions

Select this option to restore security permissions on files and subdirectories. Note that the backup ACL's option must have been selected during the original backup for them to be restored.

Existing Files Options

The recommended setting is to not overwrite a file if it already exists on your computer. Other choices include only overwriting the file if the existing file is older or always overwriting the file.

Do not overwrite existing files

Upon restoration, files that already exist on your computer will not be overwritten by files from the backup

Overwrite existing files if they are older

Upon restoration, if a file is found to exist on your computer already, it will only be overwritten if the file on your computer is older than the one found in the backup.

Overwrite existing files

Upon restoration, if a file is found to already exist on your computer, it will always be overwritten.

Restore File Placement

The default setting is to restore the file(s) to the original location they were backed up from.

Restore file to its original location

Upon restoration, all files will be restored to their original location.

Restore file(s) to an alternate location

Upon restoration, all files will be restored to an alternate location. This location can be specified by typing the path to the restoration directory in the text box or by selecting a directory by clicking on the "Browse" button that will appear to the left of the text box when the radio button is selected.

Database Restores

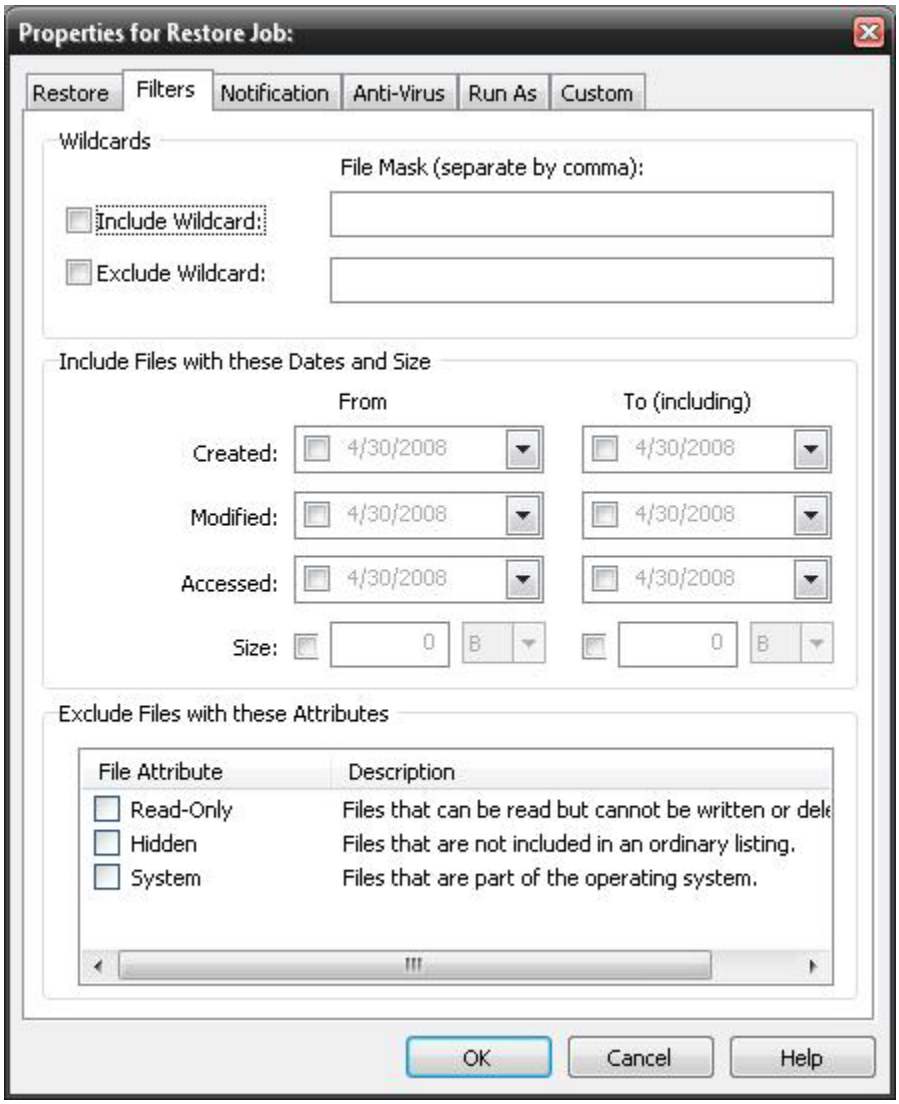
Restore the final incremental, or this is a full restore

When restoring the NovaBACKUP database always perform a full restore

Restore file to its original location

When restoring the NovaBACKUP database, always assume an incremental restore

Restore Job Filters



Wildcards

Include Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Exclude Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Include Files with these Dates and Size

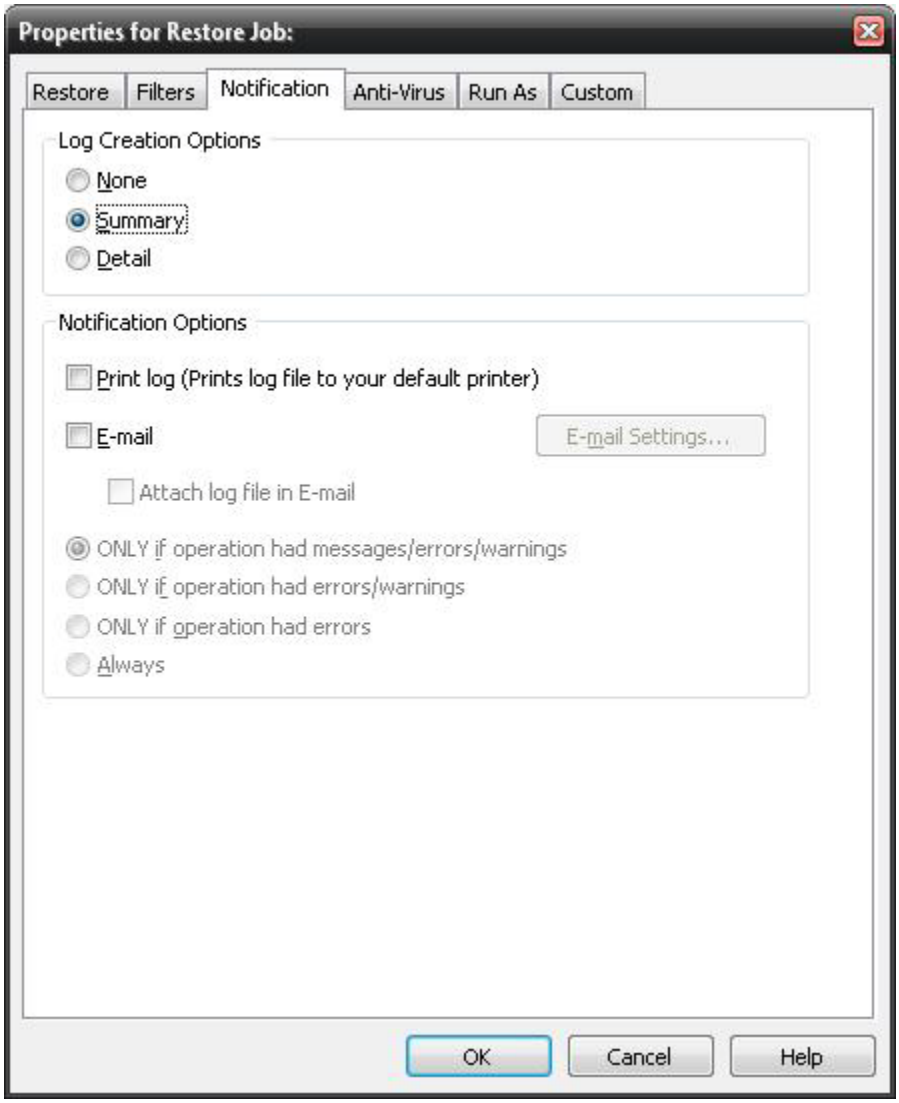
Under this section, you can create an include filter by selecting dates that files were last created, modified, or accessed or by there file size that you wish to ensure are included in your backup. This is helpful if you want to reduce the time or file size of a backup. You may want to exclude older files that are no longer accessed or larger files you have already backed up..

Exclude Files with these Attributes

Under this section, you can create an exclude filter based on the file attributes: "Read Only", "Hidden"

and "System". For example, if you would to exclude System or Hidden files, check the appropate box next to the attribute.

Restore Job Notification



Log Creation Options

None

This will disable all logging for backup and restore.

Summary

This choice will result in a brief log file for the backup or restore. This includes file totals and times.

Detail

This choice allows NovaBACKUP to provide a detailed backup or restore log for the operation. It will include information of each file that is backed up or restored during the process.

Notification Options

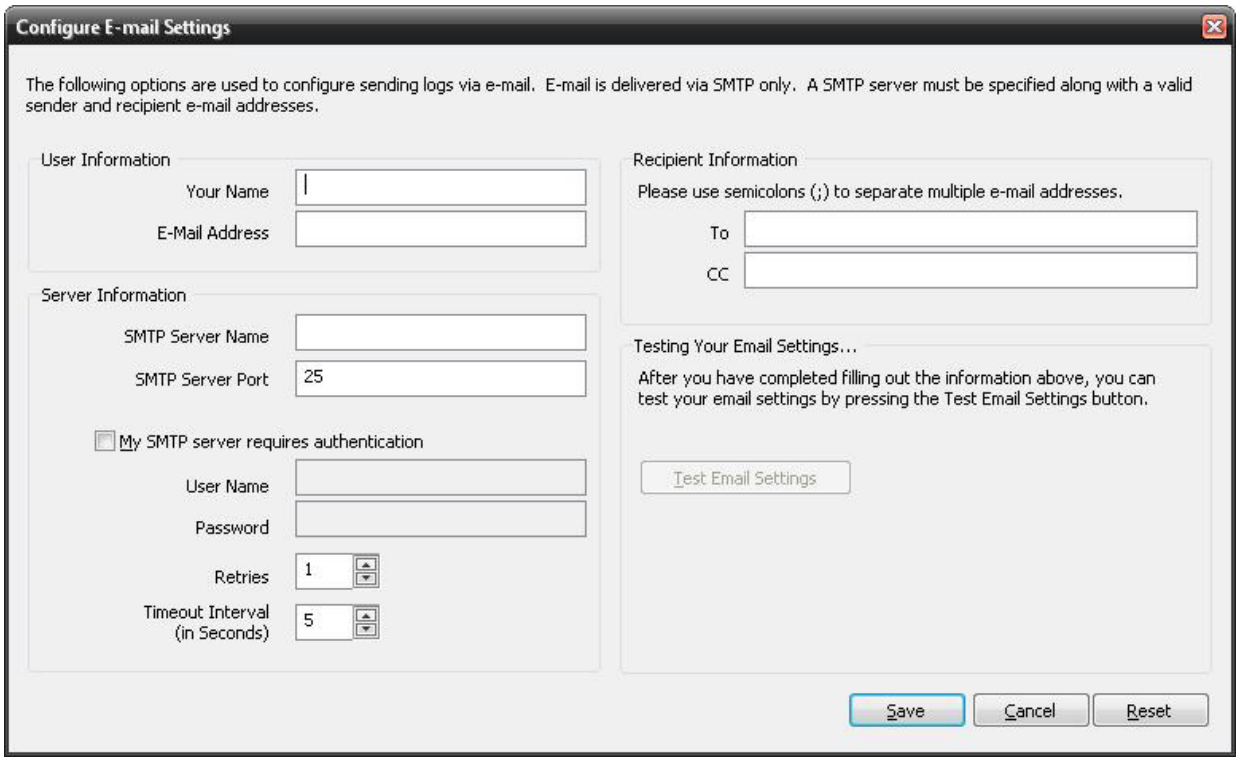
E-mail

Use this option to receive job notification in E-mail.

You have the option to allow the logs to be e-mailed to the specified email address. To utilize these settings you must first configure the e-mail options by clicking on the "E-Mail Settings" button.

E-mail Settings

Here, you will enter in the email settings required to communicate with your SMTP email server. The SMTP server information can be acquired from your System Administrator if you do not know it. You will also need to input two valid e-mail addresses for both the sender and the recipient. (These can be the same e-mail address.) If your SMTP server requires authentication, you may do so by tagging the checkbox for authentication and supplying your user name and password.


Configure E-mail Settings
The following options are used to configure sending logs via e-mail. E-mail is delivered via SMTP only. A SMTP server must be specified along with a valid sender and recipient e-mail addresses.
User Information
Your Name
E-Mail Address
Server Information
SMTP Server Name
SMTP Server Port
25
My SMTP server requires authentication
User Name
Password
Retries
1
Timeout Interval (in Seconds)
5
Recipient Information
Please use semicolons (;) to separate multiple e-mail addresses.
To
CC
Testing Your Email Settings...
After you have completed filling out the information above, you can test your email settings by pressing the Test Email Settings button.
Test Email Settings
Save
Cancel
Reset

Be sure to test your settings by clicking the "Test Email settings" button

Print Log

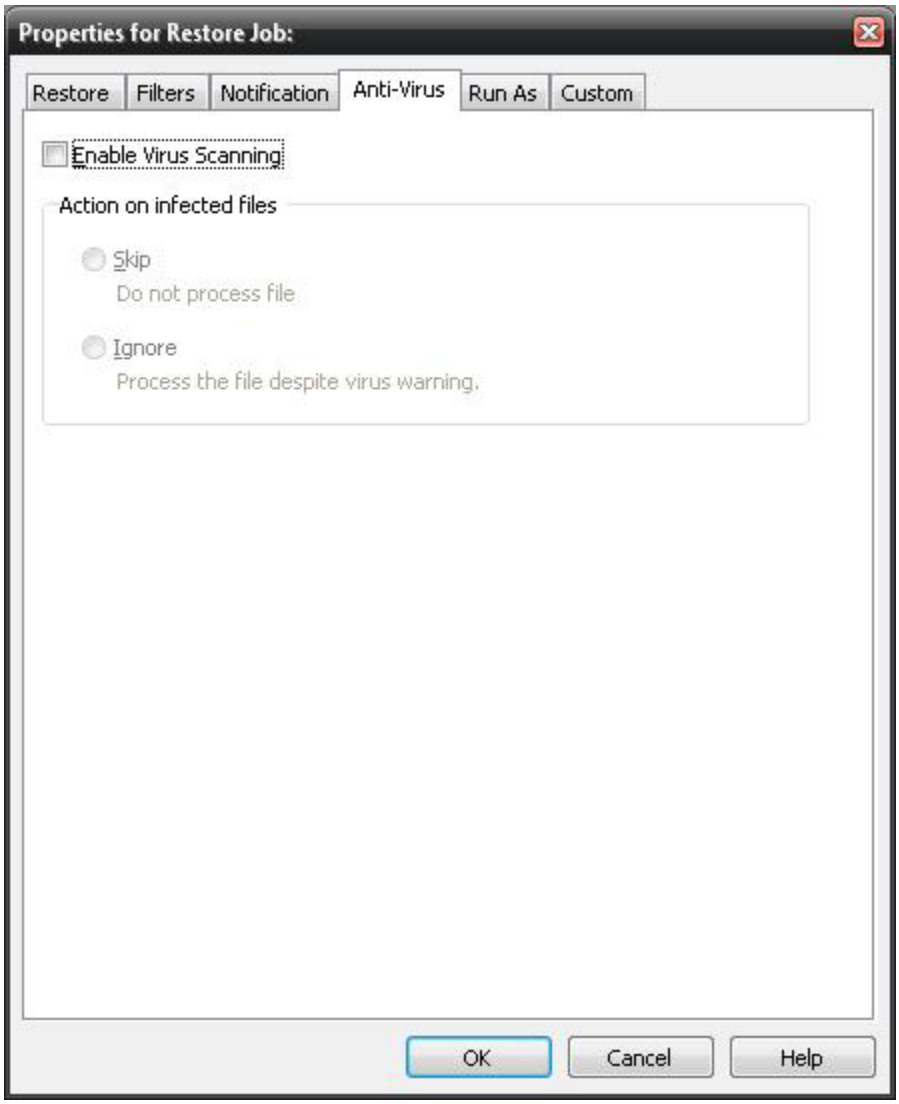
Here, you have the option to print the log automatically to your default printer.

Notification Conditions

- ONLY if operation had messages/errors/warnings
- ONLY if operation had errors/warnings
- ONLY if operation had errors

- Always

Restore Job Anti-Virus



Enable Virus Scanning

If this option is selected, NovaBACKUP will scan and report files that could potentially contain viruses and cause problems to your system.

Note: To clean, quarantine or deleting infected files, you will need a separate software program. If this option is enabled, an action for infected files needs to be selected.

Action on Infected Files

Skip-This option will *not* allow the files that have virus warnings to be backed up. This is the default selection.

Ignore-This option allows the files that have virus warnings to be backed up.

What are viruses? *Viruses are programs that run on your computer, without your consent or knowledge, with the sole intent of carrying out malicious behavior. At a minimum, they're annoying. In the worst cases, they destroy all your data and make your computer unusable.*

Restore Job Run As

When running a job, login using this account

Run as logged in user:

Run the job using the Windows login credentials in effect at that time.

Run as specific user:

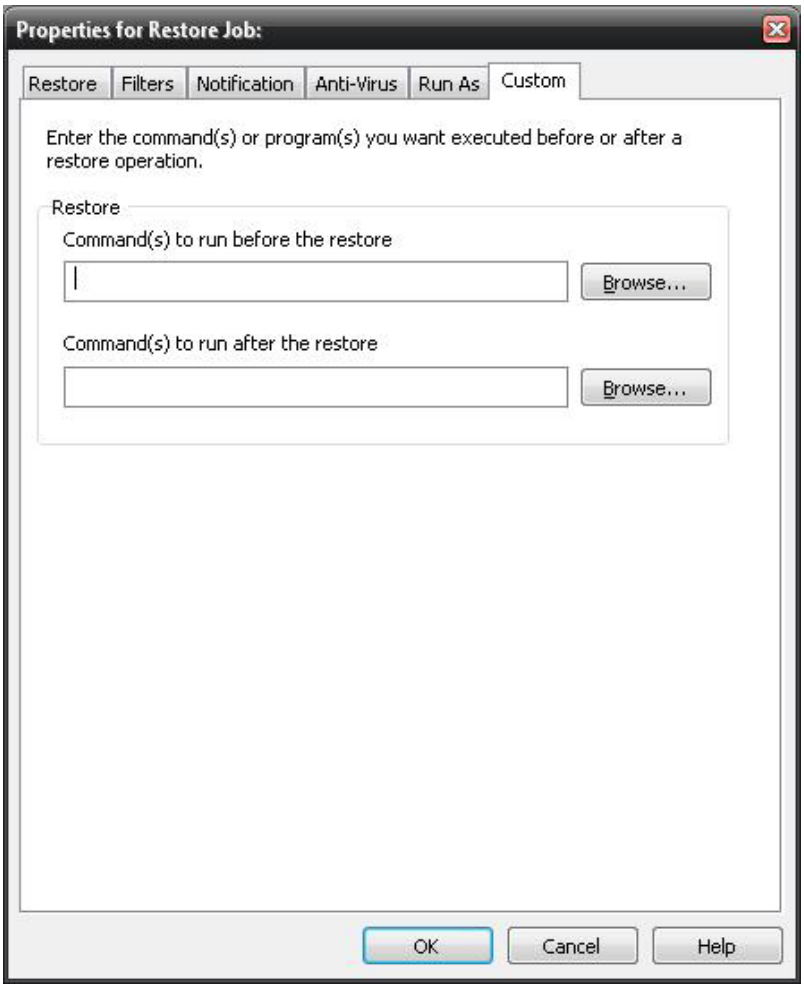
Run the job using the specified credentials.

Domain Name: The domain name you are logging into.
Run as User Name: The user name you want the job to run as.
Password: The password for the account you want the job to run as.

Note: The account information entered here is usually account you use to login to windows. However, you may need to use a different account when backing up network/shared drives.

Important: If you have entered credentials you must click the "Check Credentials" button to validate the account you have entered before proceeding forward.

Restore Job Custom Commands



This feature enables a command to run before or after a restore job

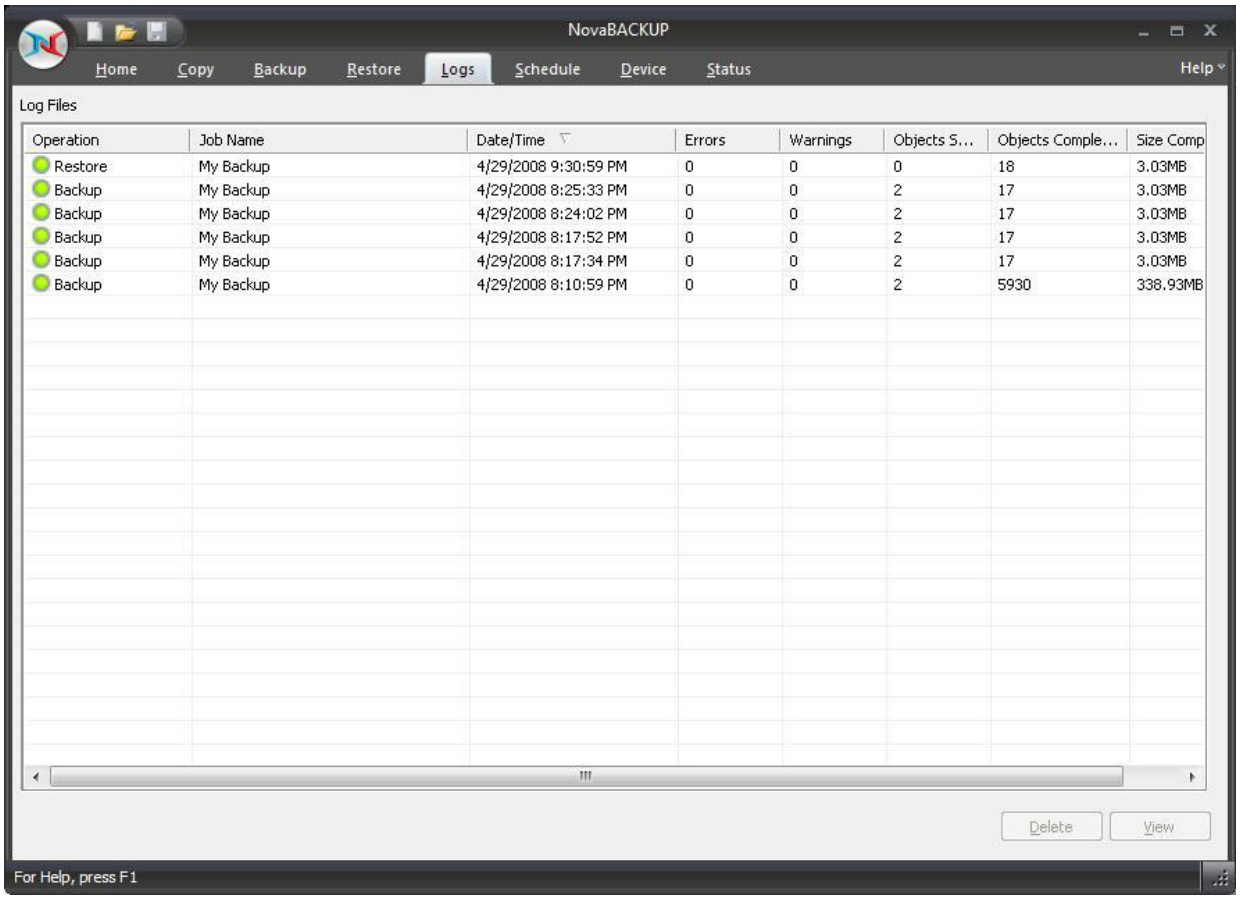
To select which program or command you would like to run before or after the copy operation, simply browse to the program or command using the "Browse" button.

The benefits of this feature are numerous. For instance, one would be able to stop Antivirus scanning by issuing a command to their Anti-virus program prior to NovaBACKUP beginning the restore job. Alternatively, a command can be issued at the end of the job to begin an anti-virus scan. Also one could issue a command to close a database at the beginning of a job and reopen it at the end of a job.

Using The Logs

Logs Tab

From here, you can quickly determine the status of a Copy, Backup or Restore job that was performed.



The columns in the summery view include:

Operation: Includes - Copy, Backup, Restore & Import.

You can quickly determine the status of the backup by the color-coded icon next to each operation:

- Operation completed successfully
- Operation completed, but had warnings
- Operation had errors

Job Name: The name of the job for this log file

Date/Time: The Date & Time the specific job was run

Errors: The number of errors encountered after running the job

Warnings: The number of warnings encountered after running the job

Objects Selected: The number of objects selected before running the job

Objects Completed: The number of objects successfully completed after running the job

Size Completed: The total size of all objects successfully completed after running the job

You can quickly sort the logs view by clicking on the appropriate column heading at the top of the window

Button Functions

Delete Button

To delete a log file, simply select the log file and press the *Delete* button. To delete multiple log files, you may select more than one by using the Shift and/or Ctrl buttons on your keyboard to select the logs and pressing the Delete button.

View Button

To view the log file, select the log you would like to open and press the View button. Alternatively, you may also simply double-click the log file you want to view. For further details, see the “Using the Logs section”.

Setting the Logging Options

Setting your logging preferences can be done from the Program Options window, the Backup Options window, or the Restore Options window. (To do so, either select Global Settings from the Home view, select the "Settings" button on the Backup tab, or select the "Settings" button on the Restore tab.)

Interpreting the Logs

Interpreting the log is not as daunting as it may seem. Below you will find an example log with explanations in **bold.**

```
Log: ------------------------------------------------
NovaStor Service
Log: 1.0
```

***The first couple of lines indicates "NovaBACKUP Backup Service" as well as the version of NovaBackX that you are running.**

```
Start time: Fri Dec 09 08:27:39 2004...
```

***This shows the time that the backup began.**

```
Log name: logs\3ebbc8ef.txt
```

***This line shows the file name of the log.**

```
SysInfo: Microsoft Windows XP, ver 5.01.2600 [Professional] [I386]
ServicePack 1
```

***This shows what Operating System and version you are running on your computer.**

```
Backup: Start
Output Device: 'disc://C:\2004_012_09_08_27AM.nb7'
```

***These two lines indicate that the backup has started and shows the destination of the backup.**

```
Backup: Reading input file: 3ebbd572.xml
Backup: Scan starting: C:\My Documents
Backup: C:\My Documents\Addresses.txt
Backup: C:\My Documents\arrow_il.cur
Backup: C:\My Documents\arrow_im.cur
Backup: C:\My Documents\arrow_l.cur
Backup: C:\My Documents\Notes.txt
Backup: C:\My Documents\Backup.nb7
Backup: C:\My Documents\My System.nb7
```

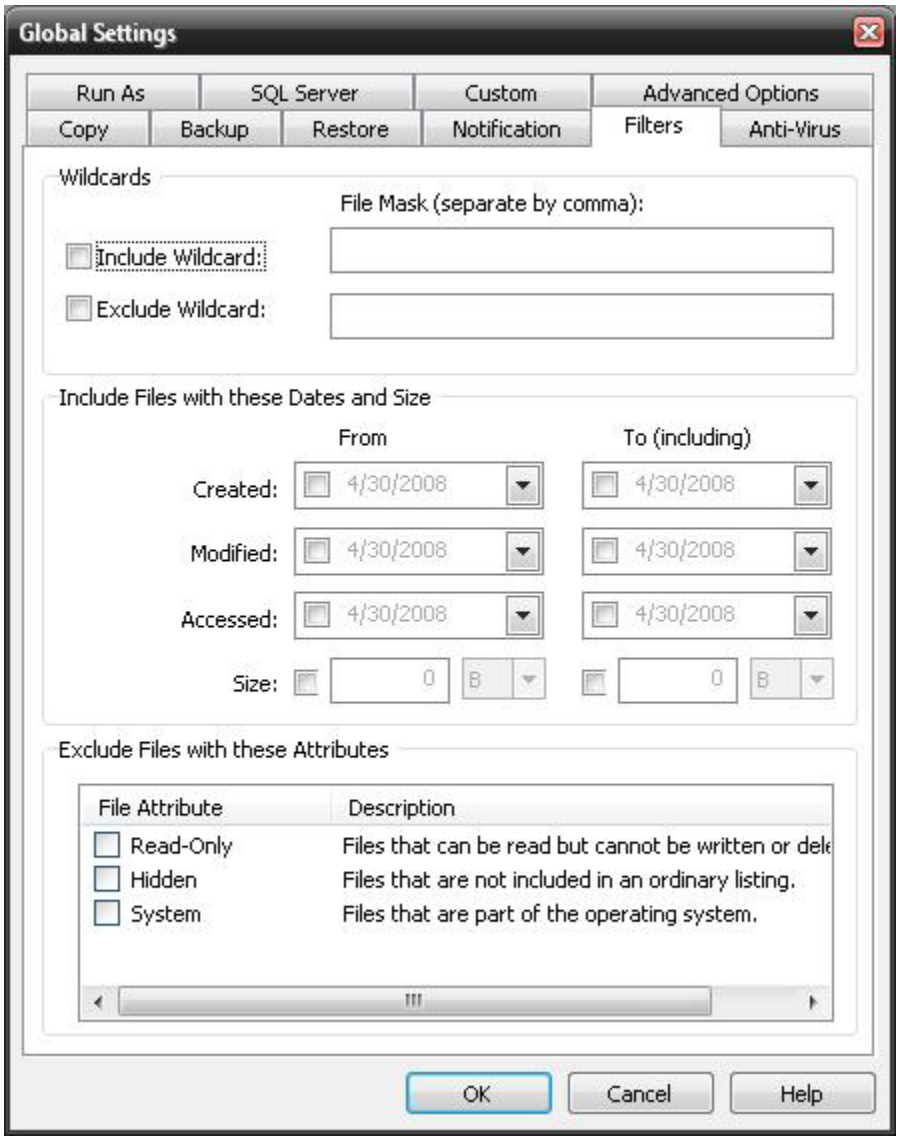
***At this point there is a listing of the files processed during the backup. NOTE: This section is only visible if you have your logs set to "Detail" mode.**

```
Backup: End
```

***This indicates that the backup has completed.**

Using Filters

Filters Tab



Wildcards

Include Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Exclude Wildcard: Enter all wildcards for files you want to include in the default job separated by a comma (example: *.doc,*.xls,*.dat)

Include Files with these Dates and Size

Under this section, you can create an include filter by selecting dates that files were last created,

modified, or accessed or by their file size that you wish to ensure are included in your backup. This is helpful if you want to reduce the time or file size of a backup. You may want to exclude older files that are no longer accessed or larger files you have already backed up..

Exclude Files with these Attributes
Under this section, you can create an exclude filter based on the file attributes: "Read Only", "Hidden" and "System". For example, if you would to exclude System or Hidden files, check the appropate box next to the attribute.

Using Online Storage

Online Storage Devices

NovaBACKUP includes the ability to backup to a number of online storage devices including FTP, Amazon's Simple Storage Service (S3) and NovaStor Web Storage Service (WSS).

Once you have configured an online storage device, you can utilized that device just as you would a local device. You will be able to perform backup and copy jobs to your configured online storage devices as well as local devices adding additional levels of protection to your data by permitting both local and remote backups to be performed.

Configuring the Online Storage Service

Select "NovaStor Web Storage Services" from the "Add Device" option drop down. This will connect you with the online provision system that will step you through the setup and configuration of the device.

From this screen, either login to an existing NovaStor Storage Service account, or click the "Sign up for a new account" link to create a new account.

From here, you will select the storage plan that best meets your needs. Consider your long-term storage requirements carefully before making this selection.

Review the "Terms of Use" scrolling down and clicking the checkbox next to "I agree" followed by "Next"

From this dialog, enter in your account details. Be sure to include a "Password Hit" that can be used to assist you in recalling your password should you forget it in the future.

Enter in your payment details here.

If you have signed up for free storage, your credit card will only be used for overages past your free storage allocation.

Confirm your order here. If you need to make changes, click the "Modify" button to go back.

Click "Finish" to complete the configuration. Once finalized, you will see the NovaStor Storage Service device listed in the device view and can select it as a backup/copy/restore device.

Configuring FTP Storage Device

Select "FTP Store" from the "Add Device" option drop down. This will display the FTP properties dialog

Device: Enter the name for this device

Server Address: Enter the DNS Name or IP Address of the FTP server. Check the "Use Passive Mode" if required.

Login Settings

Anonymous Access: Check this option if your server supports this option.

Use FTP Over SSL/TLS (FTPS): Check this option to enable a secure FTPS connection.

Use SSH/SFTP: Check this option to Use the SSH File Transfer Protocol. You then must select either the password or key authentication type. If choosing selecting key authentication, the related entries to define the key will become enabled.

Username: Enter the username for your FTP account on this server

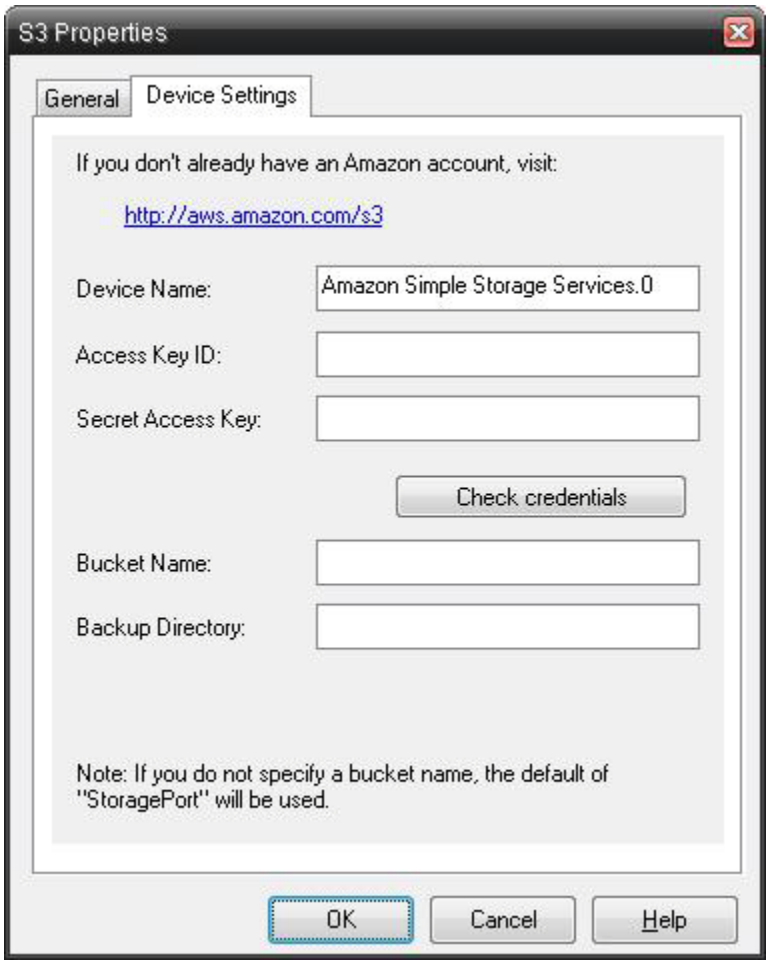
Password: Enter the password for your FTP account on this server

Backup Directory: Enter in the directory you want your backups stored in

Click "Check Credentials" to confirm your settings

Configuring S3 Storage Device

Select "Amazon Simple Storage Service " from the "Add Device" option drop down. This will display the S3 properties dialog



Device: Enter the name for this device.

Access Key ID: Enter the Amazon S3 Access Key ID for your account login.

Secret Access Key: Enter the Amazon S3 Secret Access Key for your account login.

Click "Check Credentials" to confirm your settings for Access Key ID and Secret Access Key.

Bucket Name: Enter the name of the S3 Bucket you want your data stored in.

Backup Directory: Enter the directory you want your data stored within the S3 Bucket.

Using the xSP Storage Device

xSP Storage Device Overview

The xSP storage device is used for backup to an online server.

To access settings first select the device tab.

To add a new device click the Add button then select the xSP device type.

To edit an existing device select its name in the device list then click the properties button, or right click then select properties.

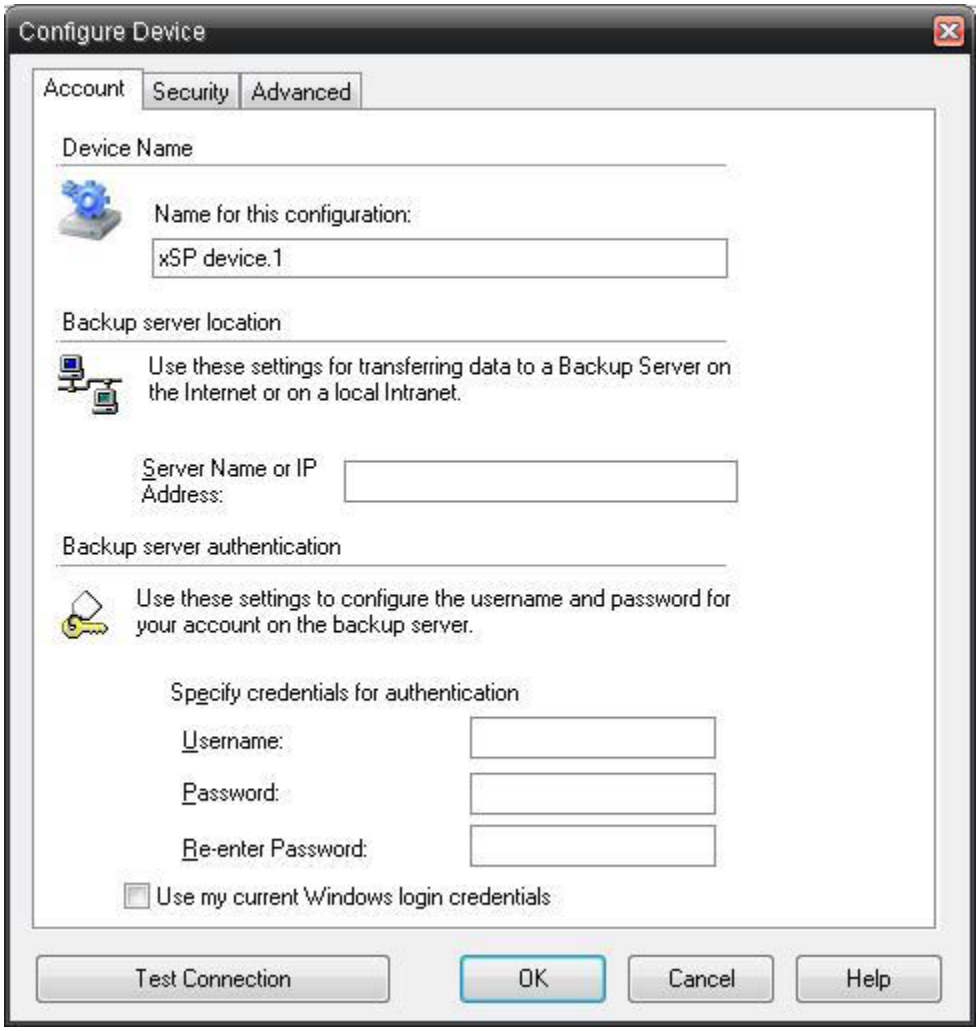
The configure screen will be displayed when adding a new device or selecting properties. Use the configure screen to edit all settings for the xSP device.

Click Test Connection if you wish to just test the specified settings.

Click OK to commit the settings or Cancel to avoid making changes.

Settings

xSP Account Settings



Device Name

• Name for this configuration

This field is used to specify any name you wish to identify the device.

Backup server location

• Server Name or IP Address

This field is used to specify the IP address or the host name of the backup server. If this value is already populated, you can disregard this entry. If this value is unknown, it can be obtained from the network administrator or backup service provider.

Backup server authentication

To enter specific credentials:

• Username: Enter in the unique username used to access the backup server.

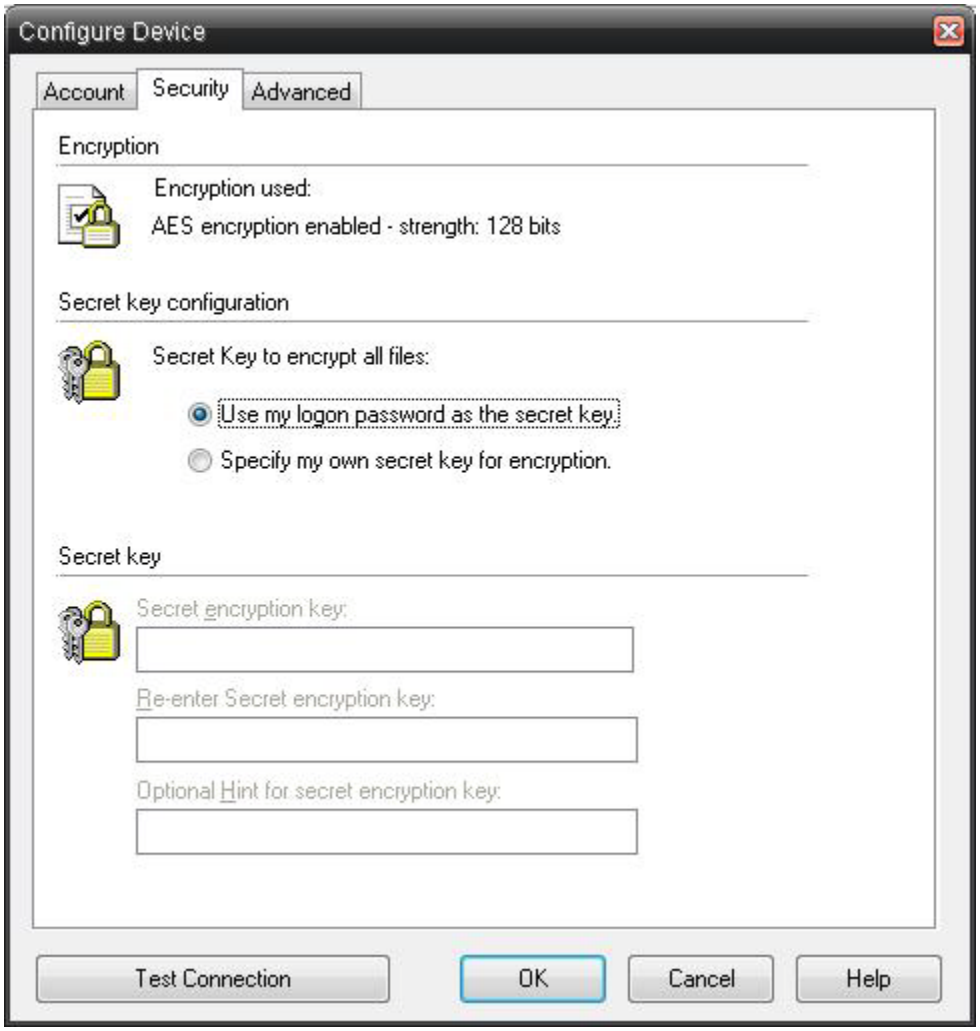
• Password: This is your logon password

• Re-Enter Password: Re-enter your password to confirm

To use your current Windows login credentials:

• Selecting this option will use the current Windows login credentials for authentication on the backup server.

xSP Security Settings



Encryption

• Encryption used

Indicates the encrytpion type in effect.

Secret Key Configuration

• Use my logon password to encrypt my files

This option will cause the backup server logon password to be used to encrypt all files.

• Set a special secret key to encrypt my files

This option will allow a private secret key of your choosing to be specified for file encryption.

Note: If the secret key is forgotten or lost, the backup server administrator may not be able to recover the data residing on the server.

Secret Key

The secret key is a special text string used to encrypt all data that is stored on the server. The secret key can be changed at any time in between backups or restores. If the secret key is forgotten or lost, the backup server administrator may not be able to recover the data on the server.

• Secret encryption key

This field is the secret key. The text can be any length and is case-sensitive. The secret key should be written down and kept it in a safe place so that it is not forgotten.

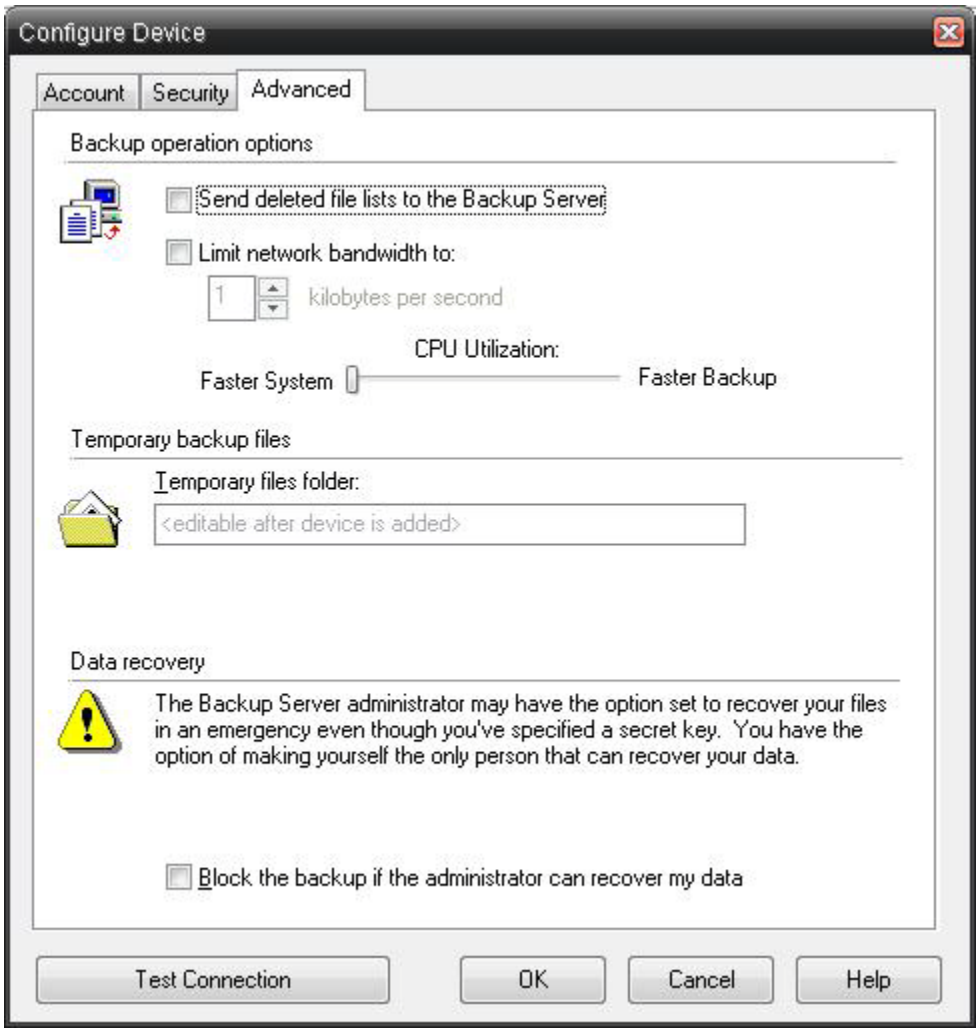
• Secret encryption key verification

This field is where the secret key should be re-typed. It is used for verification only.

• Optional hint for secret encryption key

This field is where a text phrase can be entered to allow the secret key to be remembered. If it is necessary to restore files to a fresh system and the secret key is forgotten or lost, the text phrase will be displayed so that the secret key can be recalled more easily. This field is optional. If security is a concern because somebody may be able to use the hint to guess the secret key, this field should probably be left empty.

xSP Advanced Settings


Configure Device
Account
Security
Advanced
Backup operation options
Send deleted file lists to the Backup Server
Limit network bandwidth to:
1
kilobytes per second
CPU Utilization:
Faster System
Faster Backup
Temporary backup files
Temporary files folder:
<editable after device is added>
Data recovery
The Backup Server administrator may have the option set to recover your files in an emergency even though you've specified a secret key. You have the option of making yourself the only person that can recover your data.
Block the backup if the administrator can recover my data
Test Connection
OK
Cancel
Help

Backup operation options

• Send deleted file lists to the Backup Server

Selecting this option will allow the backup server to be notified when files are deleted or removed from the selection list. Eventually, the files will also be deleted from the backup server. This occurs after the deletion date has gone out of the scope of the allowable restore window on the backup server. The allowable restore window is configured by the backup server administrator.

• Limit network bandwidth to:

This setting can be used to reduce the amount of data sent over the network in case other processes need greater access or speed.

• CPU Utilization

This setting can be used to adjust how much CPU usage may be desired for the backup process. It may be preferable to reduce CPU usage for backup so other processes on the system can run faster.

Temporary backup files

• Temporary files folder

This option can be used to specify where the backup "work files" should be saved. These files contain important information pertaining to backups. At any point in time, the contents of this folder can be moved to a different location or the folder can be emptied. Emptying the folder will remove all the files in the disk cache.

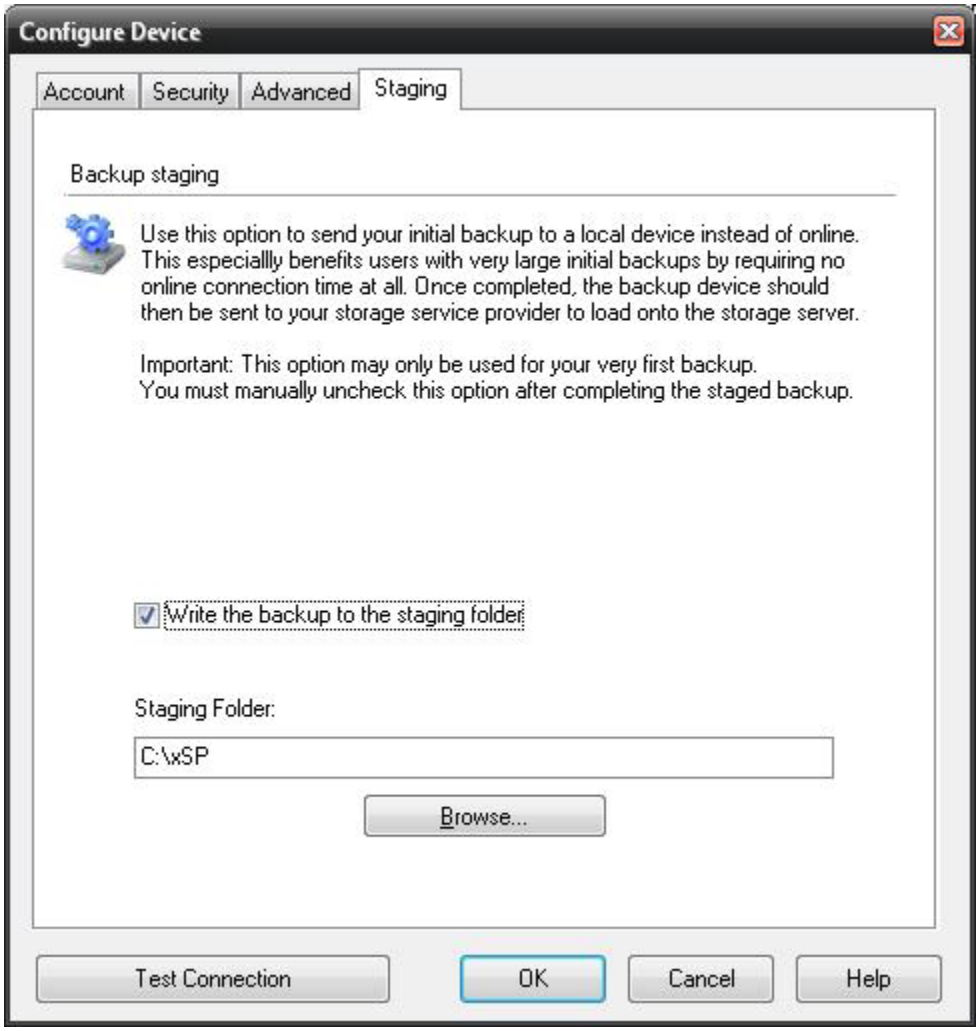
Data recovery

• Block the backup if the administrator can recover my data

In certain situations, such as a corporate environment, it may be a requirement for the corporation to have access to all the corporation’s data. The backup server administrator may set an option to allow the recovery of data without requiring the secret key.

This option should be selected to guarantee that absolutely no one else is able to recover the data for this account. IF THIS OPTION IS SET AND THE SECRET KEY IS LOST OR FORGOTTEN, THE DATA CANNOT BE RECOVERED

xSP Staging Settings

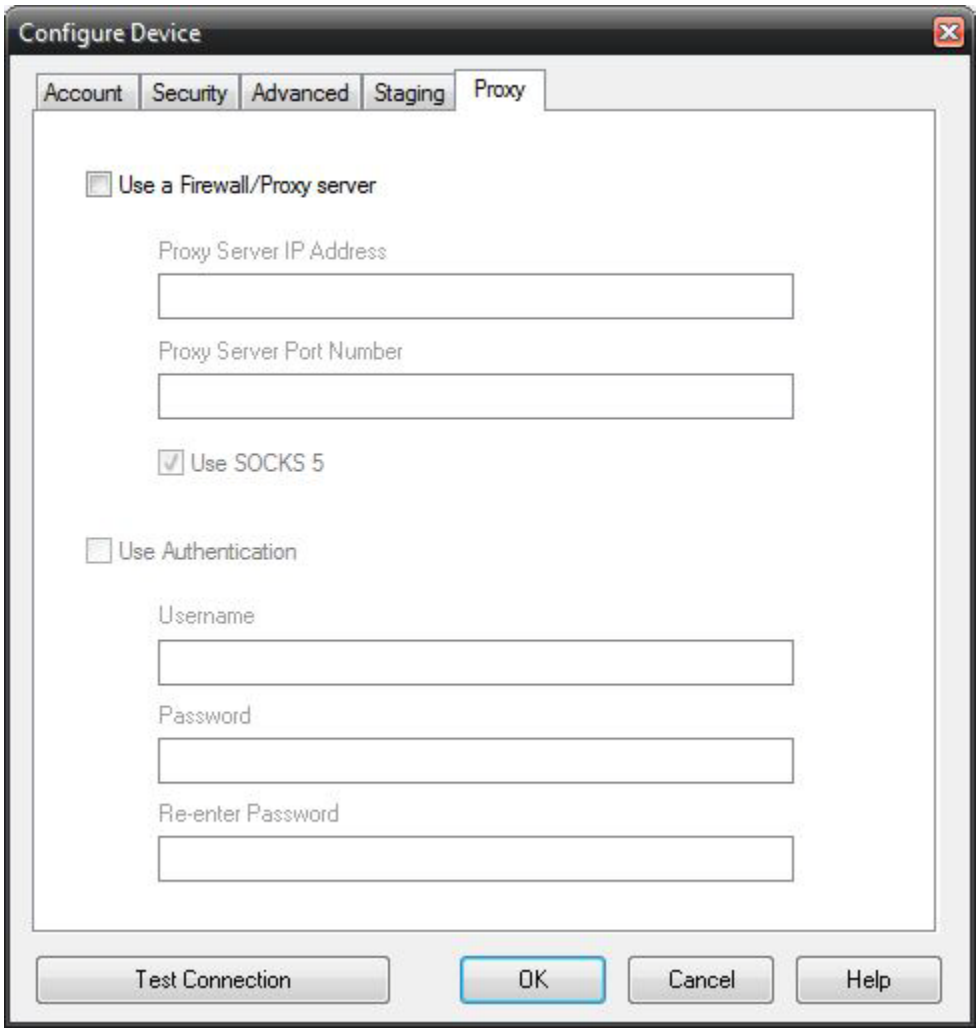

Configure Device
Account
Security
Advanced
Staging
Backup staging
Use this option to send your initial backup to a local device instead of online. This especiallly benefits users with very large initial backups by requiring no online connection time at all. Once completed, the backup device should then be sent to your storage service provider to load onto the storage server.
Important: This option may only be used for your very first backup. You must manually uncheck this option after completing the staged backup.
Write the backup to the staging folder
Staging Folder:
C:\xSP
Browse...
Test Connection
OK
Cancel
Help

Use this option to send your initial backup to a local device instead of online.

This especially benefits users with very large initial backups by requiring no online connection time at all. Once completed, the backup device should then be sent to your storage service provider to load onto the storage server.

Important: This option may only be used for your very first backup. You must manually uncheck this option after completing the staged backup.

xSP Proxy Settings



Use this option to connect to your backup server through a proxy server connection.

Using Plug-Ins

Microsoft Exchange Plug-In

Using the Microsoft Exchange Plug-in

The Exchange server plug-in works on the following Microsoft Exchange server version: 2003, 2007.

Backup using the Exchange Plug-in

If the client is installed on one of the supported platforms listed above and you have an active Exchange plug-in, you may select your Exchange server for backup using the file selection tree or list view under the Backup Tab.

If you check the box next to the server name, all storage groups (if multiple) will be selected for backup. To select only a specific storage group, expand the Exchange Server object by clicking on the + symbol and check only the appropriate storage groups you want to backup.

Note: In order to perform a complete and accurate backup of Microsoft Exchange, you should also select the "System State" object within the same backup set. For more information, review the Backup up System State section of this help file.

Restore using the Exchange Plug-in

If the client is installed on one of the supported platforms listed above and you have an active Exchange plug-in, you may restore a previous Exchange backup using the plug-in by selecting the Exchange server using the file selection tree or list view under the Restore Tab.

Note: To restore an Exchange storage group, you must mark the database as being able to be overwritten by a restore in the properties of the exchange store you want to restore using the Exchange System Manager. You also need to dismount the store. (For more information on using the Exchange System Manager, refer to your Exchange server documentation).

This will permit you to restore the exchange storage group to the original location on the original backed up machine or on a new system with the same machine name. Also note that if you are doing a full restore of exchange you need to restore the System State BEFORE you restore the Exchange Storage Group.

Microsoft SQL Server Plug-In

Using the Microsoft SQL Plug-in

The SQL server plug-in works on the following Microsoft SQL servers: 2005 and 2008.

Backup using the SQL Plug-in

If the client is installed on one of the supported platforms listed above and you have an active SQL plug-in, you may select your SQL server for backup using the file selection tree or list view under the Backup Tab.

If you check the box next to the server name, all databases will be selected for backup. To select only a specific database, expand the SQL Server object by clicking on the + symbol and check only the appropriate databases you want to backup.

Restore using the SQL Plug-in

If the client is installed on one of the supported platforms listed above and you have an active SQL plug-in, you may restore a previous SQL backup using the plug-in by selecting the SQL server using the file selection tree or list view under the Restore Tab.

If you check the box next to the server name, all databases will be selected for restore. To select only a specific database, expand the SQL Server object by clicking on the + symbol and check only the appropriate databases you want to restore.

This will permit you to restore the SQL database(s) to their original location on the original backed up machine or on a new system with the same machine name.

VMware Plug-In

Using the VMware Plug-in

The computer with NovaBACKUP installed needs to have connectivity to either the vSphere server or the ESX(i) server. NovaBACKUP can alternatively be installed on the vSphere server or on a Virtual Machine. Version 4.0 and 4.1 of ESX(i) and vSphere licensed with the vStorage APIs are the currently supported versions of software with which the VMware plug-in for NovaBACKUP can communicate.

Backup using the VMware Plug-in

Clicking on each ESX(i) or vSphere server node will display the Virtual Machines that are available to backup. These machines may be backed up individually, or all of them may be backed up at once.

You must specify the server name and user credentials for each VMware server you want to appear in the backup file selection tree. This is provided in the VMware Servers tab in the program default settings screen.

Restore using the VMware Plug-in

Restoring a Virtual Machine is quite easy. Simply select the Virtual Machine to restore in the restore screen and click the restore button.

More Information

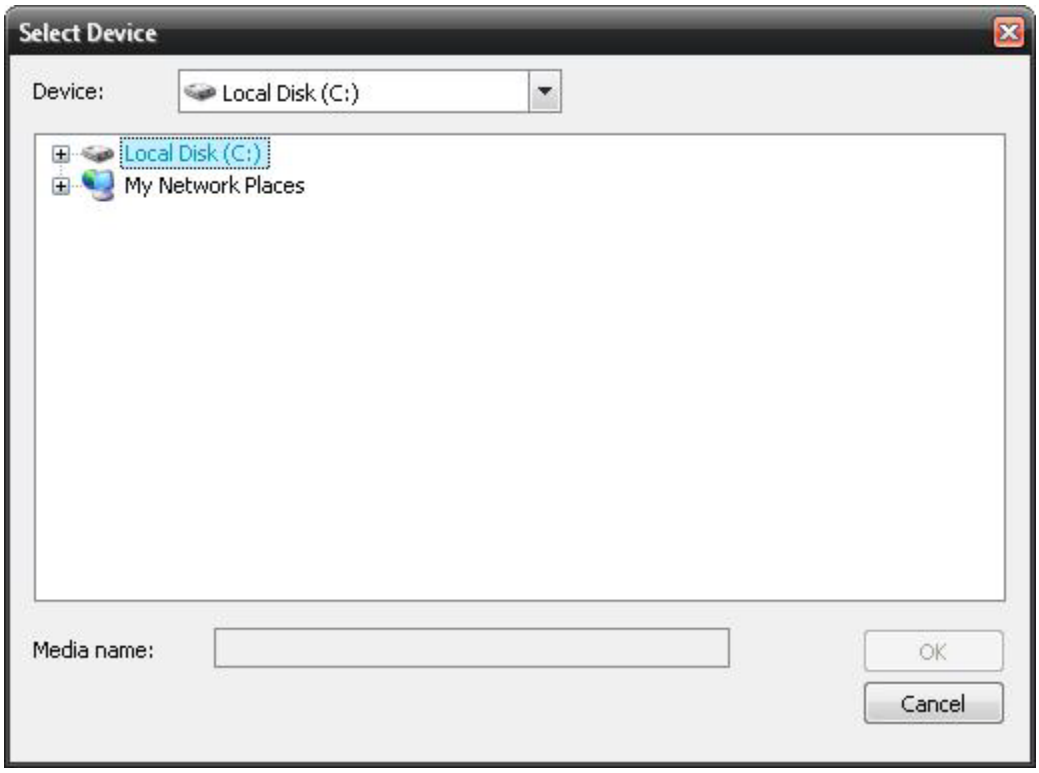
For additional information such as techniques for differential backup and restore please download the document detailing all the VMware plug-in features.

Importing Backups

Importing Backups

Importing a backup from media may become necessary if your machine crashes or you wish to restore a backup created on one computer to another computer. The process is simple. To get the backup contents into the current, local NovaBACKUP database (and therefore be able to select files, folders and drives for restoration), follow these steps: From the Restore tab, first click on the "Import" button located near the bottom of the screen. Alternatively, you can select "Import Backup Job" from the Launch Button.

If you run the import from the Restore Tab, you will receive an Import Source selection screen. (If selecting import source from the toolbar, you will forgo this window.)



You should browse to the media you would like to import and press "Open." The status tab will display and the import process will begin immediately.

If your import source is Tape, then you will be given a Tape Drive selection screen. Select the tape device you would like to import and press "OK." A progress window will then appear and the import process will begin immediately.

If you are importing from a complete set of spanned media, you should always select the first piece of media as your first import. NovaBACKUP will then prompt you to insert each subsequent piece of media if required. It is necessary to have the complete backup, all media available to do the import and

subsequent restore. For example; If your backup consists of 5 pieces of media and media #3 is corrupt/missing/ damaged, you will only be able to restore data from the first two pieces of media.

After importing the media, it may be necessary to press the "Refresh" button on the Restore tab. All imported backups will appear under an "Imported Backups" heading in the Media View.

Importing vs. Restoring

It is important to know the difference between importing and restoring. The import process does NOT restore your data to your hard drive. What it simply does is import a "listing" of available data on the imported media. This information is imported into the database and enables NovaBACKUP to create a tree listing of the data in the Restore view. From there, you will be able to select the data you would like to restore from the media and complete a restoration just like you would any other restoration.

Advanced Features

Command Line Options

You can use the command line and several options to run your backups and other scripts. This quick method will allow a user to input a single command into a command prompt to begin running a specific NovaBackX script. For more details please read the steps below.

Getting Started:

---

1. To begin, open the START menu button and then select RUN.

2. Type CMD in the line provided by the RUN program.

3. This will open a ”Command Prompt” window resembling the old Microsoft DOS.

4. Now type CD C:\program files\NovaStor\NovaStor NovaBackX

5. This will change the directory you are running commands from so that you are now in the NovaBackX installation directory, and ready to run your command.

Syntax:

---

nsCmd -u [User name] -d [Domain] -p [Password] [Options] -s [Script location]

Example 1: A basic command

nscmd -s c:\file location\backup.nbk

Example 2: Running a script specifying credentials and queuing

nscmd -u John -d Mydomain -p Password -q -s c:\file location\backup.nbk

General Options:

-q Use this option to allow queuing for the script.

-h This option will hide the console when the script runs.

IMPORTANT:

In Windows XP and 2003 server all scripts are saved by default in C:\Documents and Settings\All Users\Application Data\NovaStor\NovaStor NovaBackX\Scripts

In Windows Vista, the scripts are saved by default in C:\program data\application data\NovaStor\NovaStor NovaBackX\scripts

Scripted Environment Variables

NovaBackX is able to use Windows environment variables in the script file. Though in order to use these variables you will have to manually edit the script file. User set environment variables are not available for use, just the default Windows environment variables. Below is an example of a script excerpt using these environment variables, please notice that you have to define the variables that you want to use at the bottom of the script.

Example portion of a script file:

(. . .)

[select]

path.item.0=+$Env Variable.item.0$

path.numberOfItems=1

(. . .)

[device]

SessionLogicalId=0

SessionName=My Backup

SessionId=00000000000000000000000000000000000000000

MediaLogicalId=0

MediaExtension=nbd

MediaName=My Media

MediaId=00000000000000000000000000000000000000000

DeviceUnit=\\Server\HomeDrive\$Env Variable.item.1$

DeviceName=Network

DeviceId=0900dcfe0b0000f0a98187492b78000002000000

DeviceClassId=ntwk://

(. . .)

[Environment variable]

Env Variable.item.0=%USERPROFILE%

Env Variable.item.1=%USERNAME%

Env Variable.numberOfItems=2

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